

EDUCATION
OF TEACHERS

BY W·H·PAYNE

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The Education of Teachers

BY

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PREFACE

It may help the reader to interpret the doctrines embodied in the following essays if he has before him a brief synopsis of the writer's opinions on the education of teachers. Every man who has patiently studied the problems of education has formed for himself, little by little, an educational creed, or confession of faith; and it is well on such an occasion as the writing of a book to throw into articulate form the articles of one's faith or belief as they relate to the field of thought traversed by writer and reader.

Teaching is a spiritual art and classifies with music, poetry and oratory, rather than with the mechanic arts, the arts that deal with matter and its fixed and uniform relations.

As teaching has to do with spirit, methods of teaching should not be fixed and invariable, but flexible and fluid, adapted to the modes and phases of variable spirit. In all intelligent and effective teaching, principles, rather than rules, should be held at a premium. Versatile teaching will draw its methods from prolific principles and will reflect the personality of the teacher who uses them. When methods become uniform, teaching becomes mechanical and wooden.

Teachers should be educated rather than trained, education pointing to versatility and freedom, training to uniformity and mechanism. A teacher's education should be of the liberal type. The teacher himself should first of all be a scholar in spirit and attainment, and his strictly professional studies should also be of the liberal type.

A teacher's strictly professional education will consist of

two main elements or parts, the one psychological, the other, for want of a better term, logical; he must have a knowledge of mind in its organic modes of procedure while engaged in the act of acquiring knowledge, and he must know the education value of the different knowledges presented for acquisition. The teachers' art will then consist in intelligently adapting means to ends, and will exhibit the play of cause and effect.

The science of psychology is convertible into the art of teaching only to a limited extent, many of the truths of psychology being as remote from human control as certain truths of astronomy. There is now in process of slow formation, within the science of education, a science of education values. So far, its provisions are mainly qualitative, but even with this limitation a rational science of teaching is dependent on a determination of these values.

Modern pedagogy assumes too large a difference between the mind of the child and the mind of the adult. The difference is in degree, rather than in kind. When the child of six enters school he represents all the modes of mental activity that are manifested by the adult; and it is safer and better to infer the essential elements of child mind from the known elements of adult mind than to rediscover them by experiment in the modern "psychological laboratory."

Education is a conservative art, and progress in this art should take place by evolution rather than by revolution. Perhaps the term progressive conservatism best indicates the ideal attitude of the wise teacher. The tonic effect of historical study is conservative; and a wholesome check to educational fads and vagaries would be a patient study of the history of education.

Teaching is a beneficent vocation and the highest motive of the teacher is the love of doing good. To be humane in spirit and benevolent in act is to possess the highest qualifications for the vocation of teaching. The basis of good order and wholesome discipline is the respect and affection which the young have for their benefactors.

A sense of superiority and a pride of authority have often alienated the student body from the teaching body, and have fostered antagonisms detrimental to peace and good order. A scrupulous respect for the rights and feelings of students should be a first principle in the art of school management.

As a school is an organization, there must be a certain amount of mechanism in school administration; but when a love for the mechanical has become the prevalent spirit, the higher life of the school will be destroyed. Where masses of children are to be taught by a comparatively small number of teachers, too much reliance is placed on the mechanics of school administration, and there is many a school system, highly organized as a machine, which provokes the inquiry: Can these dry bones live?

The low state of educational science is indicated by the fact that writers who speak with authority have invented a fiction they call Nature, and then, by a curious illusion, have proceeded to build on it as though it were a fact, thus confusing science with mythology.

W. H. PAYNE.

WOODLAWN, MONTEAGLE, *May 15, 1901.*

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THE EDUCATION OF TEACHERS



I

THE EDUCATION OF TEACHERS

THE history of normal schools shows that their original purpose was merely to extend the scholarship of those students who intended to become teachers, the theory being that fitness for teaching consisted in the possession of more than the average amount of learning. This had been the conception held by the ancient universities, which were teachers' seminaries, whose students, obliged to teach as a condition of graduation, bound themselves to teach for a specified time after graduation. It is easy to see how this thought would naturally be transferred to the people's schools at the time when the Reformation had made it necessary that every child should be educated. This new movement required the sudden creation of an army of teachers who were to be improvised, so to speak, by selecting the brighter pupils in the schools and giving them a more thorough and a more extended knowledge of subjects.

The next movement in normal instruction might have been anticipated. It would necessarily happen

that teachers having good scholarship would sometimes fail, while other teachers, though having poorer scholarship, would meet with surprising success; and it was an easy inference that method was another element in a teacher's professional outfit almost cō-ordinate with scholarship. Pestalozzi was an illustrious example of the fact that a man of very limited learning may nevertheless become a great teacher. He had such sovereign confidence in method as distinguished from scholarship that he believed a textbook constructed according to his method would enable an illiterate man or woman to become a good teacher. His dream was to make education universal. To this end he would make of every home a school, and of every mother a teacher; and to the obvious objection that these mothers were too ignorant to teach, he replied that, armed with his method, ignorance was no bar to home instruction. Jacotot also aimed at universal instruction, and in answer to the objection that it was not possible to supply the requisite number of teachers, owing to the prevailing ignorance, he resorted to his famous paradox: **ONE CAN TEACH WHAT HE DOES NOT KNOW.**

Following what may be called the Pestalozzian movement in education method became the dominant

feature in normal instruction, and scholarship was relegated to a subordinate place.

The next movement might also have been anticipated. The brilliant success of Pestalozzi brought forth a lusty crop of competitors and rivals. As it was by his "method" that Pestalozzi had triumphed, each contestant felt obliged to exploit his own method in order to make a stand against the reigning craze, just as in these latter days each ambitious educator must exploit his fad in order to compete on even terms with his brethren who are exploiting their fads. Method was thus pitted against method, and it could not fail to happen that each innovator would finally be forced to defend his hobby by pleading some doctrine or principle as its basis and final justification. The center of debate has thus been transferred to the field of science where the final stand must be made, and here the contest is waxing warmer and warmer. One educator invokes the name of Spencer, another of Frœbel, and another of Herbart. Each is apparently deaf to the merits of every system of educational philosophy save his own, holding that his prophet has delivered the final message to the world.

It results from this brief historical statement that experience has developed three main factors in the

professional education of teachers: scholarship, method and doctrine. Under scholarship is included little more than a thorough knowledge of the subjects included in the ordinary school course. By a sort of forecast it is determined what subjects a student may be called on to teach; these he is made to master with great thoroughness, and with the ever present thought that they are to be the instruments of his calling, and that their chief value lies in their instrumental use. The narrowing effect of this mode of study is still further intensified by the student's preoccupation with method. Much of the working power of his mind is absorbed in the effort to answer the ever recurring question: "How shall I present this subject to my class?" Insistence on technique reaches its culmination in the practice school when the student, in a class not his own, and in the face of perfunctory critics, is made to exemplify the methods that have been prescribed by the teacher in charge of this branch of the professional work. I am far from saying that this question of method is unimportant. My only purpose in this place is to show that under the conditions named the attainment of real scholarship becomes impossible. Perhaps liberal learning is not desirable as a qualification for the teaching office. That may be an open

question; but if it be considered a condition essential to high success in the teacher's vocation, it must be secured under different conditions. In the pursuit of liberal learning, or culture proper, the mind must work in an air of freedom, and must be absorbed in the subject itself, and not in the utilities that it may be made to serve. What Plato says of the study of arithmetic is true of every study that is to enter into a liberal education: "Not cultivating it with a view to buying and selling, as merchants and shopkeepers, but for purposes of war, and to facilitate the conversion of the soul itself from the changeable to the true and the real."

I shall now venture to speak of scholarship, method and doctrine, or science, in what seems to me to be the sequence of their importance, and shall try to give in outline my conception of the attainments, general and professional, which constitute real fitness for the teaching office.

It is a flagrant misuse of the term scholarship to limit its content to the branches of study included in the ordinary normal school course, or even in a college course. Scholarship includes spirit as well as matter, an attitude of mind and disposition of soul, as well as the knowledge communicated in class rooms. Many

a man has been graduated from college and university without in any true sense becoming a scholar; while many a man has brought from the high school, and even from the farm and the shop, the essential spirit and some of the literary attainments of the genuine scholar. In respect of knowledge, scholarship implies breadth, perspective, a lifting of the intellectual horizon, making of the man "the spectator of all time and all existence"; and in respect of spirit, it implies delicacy of taste, a tempered imagination, and that awakened zeal in learning which makes the man "curious to learn and never satisfied." The scholar must advance far enough in the literary life to reach that state which Macaulay calls "intellectual emancipation," that consciousness of power and that poise of judgment which, in the realm of thinking, makes the man "a law unto himself" in the formation of his own opinions. A sense of mastery and power, a free flight of the liberated spirit, an abiding pleasure in intellectual pursuits, a conscious participation by the individual in the moral life of the race, these are some of the marks of the scholarly vocation. The study that does not lead up to these high endowments misses its supreme prerogative. It is not to be expected that even under the best conditions a student

will manifest in any full measure the spirit of the scholar while his studies are in progress; but it is to be expected that the conditions under which he studies should be favorable to the growth of this spirit, and that as he enters more and more fully into the beneficent school of experience, riper and more abundant fruits will be gathered from the seeds of this early planting.

It is very certain that students who are pursuing their studies under the galling stress of official and officious criticism, and are constrained to ask at each step of their progress, "what utility can I draw out of this," are working under conditions that are hostile to the rise and growth of the scholarly spirit. An atmosphere of freedom should pervade every school. Every course of study, however elementary, should be liberal in its spirit and purpose. Studies should be learned for their own sake, and not with reference to the utilities that they may be made to serve; for "they teach not their own use, but that is a wisdom without them and above them, won by observation." The more perfect the form and manner in which a study is learned, the greater will be its utilities when experience calls for them; and it is no paradox to say that this form and manner will be most perfect when

the study is learned without the least reference to its future utilities. A divine admonition warns us against disquieting ourselves concerning the three great wants of the physical life—food, drink and raiment, and directs us first of all to make sure of that which includes them all, the Kingdom of God, that perfect state of soul which is righteousness and peace and joy.

✓ This sharp insistence on the technical and the practical, which I think has wrought such harm in the education of teachers, has resulted from a false conception of the teacher's art, which degrades it into a handicraft or trade with rules as rigid as those of the mason and the carpenter. Teaching is a spiritual act or art in which mind comes into mysterious and quickening contact with mind, soul with soul, heart with heart, life with life. Analogies drawn from our dealings with matter utterly fail us when we come to deal with spirit. We are not dealing with uniform material and fixed dimensions, but with all the variations and diversities of impalpable spirit. The products of our art are not uniform, but multiform, and our processes must needs be so variable that we cannot follow rules, but must be guided by principles. We are not working in that sphere of activity where two times two is four, but where two times two is often

ten. In its highest aspect, teaching is a process of provocation, or induction, whereby a free and impressible spirit takes on moral and scholarly qualities by near presence to a soul highly charged with moral and scholarly qualities. What better advice can be given to a teacher than this: "Become addicted to the scholarly vocation until you are possessed by the scholarly spirit; charge yourself highly with benevolence, and be kindly affectioned towards those whom you would guide and teach; make large investments in yourself, to the end that you may become 'noble and gracious, the friend of truth, justice, courage, temperance?'"

The studies whose special value lies in the fact that they are catholic, or breadth-giving, are geography, history and literature; hence the teacher who would endow himself with a proper frame or attitude of mind should addict himself in an especial manner to these three subjects.

In geography the central thought is the fact that the earth is the home or dwelling place of the human race. From this point of view geography becomes a humane or culture subject of the first quality, and the effect of this study is to make the student cosmopolitan and catholic, tolerant and beneficent.

The charm and value of history lie in its delineation

tions of national life, its record of the struggles endured by the race and the steps taken in its upward and onward progress. In its pages we witness the slow and painful evolution of human liberty and the gradual development of the moral and intellectual life. Seeing the struggles and sorrows of the race, we are brought into sympathetic relations with the human family and are prepared to do service towards the betterment of the world.

Literature brings us into special and intimate relations with the very heart, mind and life of the race through its choicest spirits and noblest representatives. The highest attainments of the race in thought and feeling, its highest, purest aspirations and ideals become our heritage and endowment through the reading and mastery of good books. Virtue becomes capitalized in the literature of the race, so that in the moral life we may start with the attainments made by the better spirits of our age. These three humane studies give us poise, vision, and tempered zeal, and so prepare us to deal intelligently with the problems of human education.

The best defence for the general study of the physical sciences is not their practical utility which accrues to the race through specialists; but their culture

value, as they enable the mind to interpret the cosmos, to unravel the mysteries of our physical environment. As they deal with matter and not with life, and particularly not with human life, they cannot be classed with geography, history and literature as humane studies; but as they deal with general causes and reach large generalizations they give the mind a firm grasp on details, explain phenomena and make the cosmos intelligible. Their study greatly increases the comprehensive power of the human mind and gives a comfortable sense of mastery over infinite details. For the great mass of men these studies serve, not for ability, but for delight. We need to know astronomy, not that we may draw utilities from the stars, but that we may be made worshipful and reverent.

The biological sciences have the same defense. Human physiology, seemingly the most practical of them all, is best defended on the ground that it explains the curious mechanism of the living human body. Save in the limited domain of hygiene, a knowledge of physiology is only indirectly useful to the mass of men. In the main there is the same reason for knowing the structure of the human body as for knowing the structure of a steam engine; the knowledge resolves a mystery:—we can comprehend

a wonderful piece of mechanism. It is a debatable question whether, on the whole, a knowledge of physiology is conducive to the health and happiness of the laity. If we could tamper with the mind as we can with the body, who can doubt that a knowledge of psychology might be harmful rather than helpful? Whether a physician's knowledge of his own body is conducive to his health and happiness is doubtful; indeed the contrary may be maintained with much show of reason.

The teacher's interest in psychology is twofold. It is a prime culture subject in the sense that it enables him to comprehend the world within, the world of spirit; and its main principles are readily convertible into rules for guidance, teaching being in the main an applied psychology, just as medicine is an applied physiology. To serve these purposes in a high degree psychology should be a positive science, dealing with the actual facts of the spiritual life, and not a speculative science dealing with mere hypothesis and clothing the treatment in congenial obscurity. It should represent in a natural sequence the series of processes through which the mind passes while engaged in the art of learning; motive, will, attention, acquisition, retention, representation and elaboration. Studied

from this point of view, psychology has the same concrete, attractive interest for the teacher that physiology has for the physician. The main facts and laws of the spiritual life are as plain and as easy of comprehension as the main facts and laws of the physical life.


The teacher should aspire to know something about art, if not in the way of execution, at least in the way of appreciation; just as he may be addicted to poetry and music without being either a poet or a musician. From the noble creations of architecture, sculpture and painting, he should find contemplative delight and refreshment of spirit, and gain delicacy of taste and some power of æsthetic discernment. Such extravagance of beauty as there is in the world of form and color is not without some high purpose and should not fail to yield some high uses. To this end there must be some development and training of the æsthetic sense, which is the mission of art. Alike in literature and in art the aim of the student should not be criticism, but appreciation. To pose as a critic before the masterpieces of literature, architecture, sculpture and painting is ridiculous. The only becoming attitude for the mass of intelligent men is appreciation, enjoyment. What a sorry business to

sit in judgment on Wordsworth, Wren, Canova, and Turner! But what a privilege and delight to enter somewhat into the beautiful world which these masters have created for us!

Under scholarship there should be included a knowledge of what we may call the major educational classics of the world. It is almost a liberal education to be well versed in this literature; for it is literature in the best sense of the term which De Quincey calls "the literature of power." Much of the so called educational literature of these days is not of this rank, but would, by comparison, classify more appropriately with cookbooks and gazetteers.

It is hardly possible to overestimate the value of the history of education. In all ages of the world the wisest and the best men of their time have devoted themselves to the betterment of the race through processes and systems of education, and the record of these great humane movements, showing how the art of education has been perfected through successive failures and successes, is certainly the most instructive page of human history. The great need of teachers is vision, broad and accurate; a discriminating outlook upon the drama of existence as it portrays the struggles of the race upwards towards the light. Each

age of the world has verified Plato's *Allegory of the Cavern*. The race has been saved by a remnant, but the consoling fact is that this remnant has grown steadily larger, and we may hope that finally all men will turn their faces to the light, and that the cavern of ignorance and bigotry will become tenantless. A just historical perspective will make us optimistic, will give us poise, will make us courageous, and will arm us with the moral power and resolution of the race. In one of his moments of inspiration Rousseau exclaimed, "A teacher! What a noble soul he ought to be!" To teachers of this sort, to teachers worthy of the name, the kindly light coming from the history of education is worth a whole library of "devices." Rightly conceived and rightly taught, this is a culture subject of the highest type, while at the same time its practical bearings are of hourly value. A certain style of school building, once in vogue, was condemned and abandoned fifty years ago by the wisest school men of the country; but strange to say this abandoned plan is still copied in expensive structures to the discomfort of pupils and the waste of public funds. Without a knowledge of the successes and failures in school administration, it is easy to miss what is best in current practice, and quite possible to



rediscover abandoned systems and methods. A constitutional cure for fads would be the historical spectacle of the wrecks and ruins thickly strewn along the path of educational experiment; for all along the ages education has been experimental science, and what remains in the best current practice is the survival of the fittest, the small residue out of many ambitious systems and projects. When one becomes enamored of a fad, it would be a wholesome caution to recall De Witt Clinton's premature apotheosis of Lancaster and Bell. Both for culture and for guidance, a teacher should be "the spectator of all time" in the field of educational history.

In respect of scholarship in the narrower sense of the term, in a knowledge of the subjects to be taught, the normal schools supported by the State have always been true to the best traditions. They have uniformly aimed at thoroughness and have never disgraced sound learning by a profitable resort to expeditious methods.

No risk is incurred in declaring that in the high and legitimate sense of the term the college and the university of the future will be of the normal type; that is, their avowed purpose will be to educate men and women, not to be mainly useful to themselves and their families by the gathering of wealth and renown,

but to become living factors in the education of the race. Education is becoming more and more an ethnic problem; the conception is growing that the supreme aim of living in this world is the perfection of the race; that in an active and real sense all men and women must become educators; and that the main and particular purpose of the higher institutions of learning is to prepare students for the work of elevating and perfecting the race. Perhaps in an unconscious way the universities of the age are now moving towards this larger conception. The chairs of education established in so many of them serve a high purpose for the general student, as well as a special purpose for the student who expects to teach. It will ultimately appear that their largest following will be from students who are in quest of a liberal education. In other words, it can hardly be doubted that the university of the future will be modeled after the conception so happily expressed by Herbert Spencer: "*The subject which involves all other subjects, and therefore the subject in which the education of every one should culminate, is the Theory and Practice of Education.*"

It will be the aim of the student, through religion, through history, through literature, through science,

to epitomize and embody in himself the net attainments of the race in virtue, in discipline, in learning, in culture, and all to the end that he may be an agent in the education and perfection of human society. The golden age of the world is to be the age that is most wisely and wholly devoted to the betterment of humanity; in that age all men and all women will be either teachers or educators, and all schools will be avowedly normal in spirit and purpose.

“And the law giver will appoint guardians: some who walk by intelligence, and others by true opinion only.” In this quotation Plato marks the distinction between guidance that proceeds from the interpretation of a principle, and guidance that proceeds from the application of a rule. As teaching has to do with spirit, and as spirit is multiform in the modes of its operation, education is a free or liberal art whose practice requires that versatility which springs from a broad intelligence and from a comprehensive knowledge of general principles. It cannot be too often repeated that teaching bears no likeness to the mechanic arts where rigid rules and exact measurements are required. It is even doubtful whether procedure by fixed rule is ever permissible in real teaching.



In our dealings with spirit all analogies drawn from the manipulations of matter are full of mischief.

In all the arts that deal with the imponderable, the free or liberal arts, procedure by fixed rule is impossible; the utmost and the best that can be done in the way of preparation for the practice of these arts is a clear comprehension of general principles. A school that should propose to teach the art of statesmanship would be laughed out of existence in a month. Neither journalism, oratory, nor literature, can be taught as an art, as a system of processes. Each man must construct his own art out of his fund of intelligence and out of the special requirements of time, place, and circumstance. In medicine, no one but a quack follows a fixed rule of practice. In his college the physician learns the science of medicine and out of general principles he draws his art, in each case modifying his practice to suit temperament, age and sex. He will have as many arts as he has patients. In the practice of the law the same thing is true. In the law school the student learns a science, and when he comes to practice he will have as many arts as he has cases. In the practice of teaching the relation of art to science is the same as in the instances just cited. In his professional school the teacher should learn a

science, out of which, on the occasion of experience, he should construct his art. The texture and character of this art will depend on the net personality of the teacher, on the quality of the science he has learned, on the character and disposition of his pupils, and even on the environment of his school; so that there will be as many arts of teaching as there are teachers, even as many as there are pupils.

Whether a science can be turned into a successful art will of course depend in the main on the intelligence of the teacher. Some men cannot learn a science, and some men, having learned a science, are incompetent to convert it into an art. We may suppose that many teachers stand in this case. What are they to do? Manifestly if one is stupid and must teach, he will do better with rules than he could do without them; but such a man has mistaken his calling; he should be drawing water or hewing wood. A turn of the political wheel may put a stupid man in a position where statesmanship is required, and if he must act, it will be better for him to follow a blind rule than to follow his mere caprices or guesses; but such a man has no call to play at statesmanship; he should follow some vocation compatible with his stupidity.

In order to be readily convertible into an art, a

science should not be composed of ultimate principles, but of what logicians call *axiomata media*, or middle principles, that stand between the broadest generalization and the narrower empirical rules. To say that education is life may in some occult or metaphysical sense be true, but it is a formula so void of meaning, so remote from experience, that it is a mere philosophic or poetic ornament; it can be converted into no utility. Psychology readily shades off into metaphysics, or the search for ultimate causes, and finally loses itself in that region of obscurity which is so congenial to speculative minds. When psychology has reached that state it is worthless for a teacher's use. As a teacher must himself be sane, his science must be sane also. Muddiness is often mistaken for depth. A statement may be profound, yet clear. Any statement that is not clear, that cannot be interpreted by the intelligence, should be cancelled from the teacher's science.

Education is a derived or composite science drawing its matter chiefly from religion, ethics, sociology, psychology and logic. Teaching, for the most part, is an applied psychology and logic, but education derives its inspiration and aim from the other sciences named. In one very important department, as yet without a

name, the science of education has matter all its own, matter not derived from any other science. It is that department which discusses and determines the education value of studies. The discussion of these values is as old as Plato's philosophy and as new as Herbert Spencer's, while between come contributions from Rabelais, Montaigne, Locke, Bacon, Hamilton, Whewell, and Bain. Ultimately we shall have within the great science itself a science of values, a sort of *materia medica* of the teaching art, and until this step has been taken it is difficult to see how any further rational progress can be made in the art of human education. It is just as important for a teacher to know the education value of literature as for a physician to know the therapeutic value of quinine. Under the conception that education is a process of growth taking place through nurture and exercise, studies become foods and disciplines, and to prescribe them wisely one needs to know their several values.

Method may be defined as a mode of procedure based on some principle or law. Divorced from the principle which justifies it, a method becomes a rule, and rules are the bane of teaching. This statement will make clear the objection that has been urged against the practice current in many normal schools of

making the main part of its professional instruction consist of methods and devices to the neglect of scholarship and science. Freedom, versatility, variety, adaptation, are pedagogic virtues of the first order; but there is no freedom in mere method, in method isolated from the principle that underlies it. Freedom is to be found in some large truth, in some principle that includes many instances and so suggests many applications. The science of mechanics comprises only one or two general principles, but these principles include an infinite number of instances and so admit of a countless number of applications. It has been well said that nothing is so uniform as ignorance. The uniformities of rule invariably lead to routine, and routine destroys the life of teaching. The only uniformity that can be desired in method is typical uniformity, that is, likeness to a type or class, and not to an individual of a class. The general principle that perception begins with masses and then descends to parts, gives rise to that method in reading which presents words before letters, or sentences before words; but twenty good teachers of reading may follow this general principle and each may introduce into her practice some modification or variety that will make twenty methods in the aggregate, but they will all be

correct methods because they all conform to one rational type. In a company of ladies there may be a hundred costumes, each reflecting the taste and personality of the individual wearer, but all conforming to one type or style. Even so every real teacher will introduce into her methods something of her own personality, but at the same time they will agree in type with the methods of other teachers who follow the same general principle.

Whether a teacher's methods shall be inspiring and creative, or obstructive and deadening, will depend on whether, to borrow Carlyle's imagery, he is a live coal, or a dead cinder; and it is necessary to be kept in mind that in some way a student must be transformed into a quickening spirit before he can become a real teacher. In a school devoted to the education of teachers there must be a prevalent spirit provocative of high moral aims, devotion to duty and love of the scholarly vocation. This spirit should be so prevalent and so tonic as to form the vital breath of every learner; it should proceed, not from one instructor, but from all; and it should be so effective that it can be felt as a living, vitalizing power wherever students congregate—in chapel, in classrooms, in lecture halls, in art rooms, in library, everywhere.

By virtue of this indefinable but real spirit some schools predispose their students to scholarly habits, to sobriety and refinement of manners, to beneficent purposes, to noble ambitions; and this spiritual tuition is infinitely better than mere drill, learning, or method, and must certainly accompany them if education is to be a transforming and perfecting power. If the term enthusiasm had not lost its primitive and noble meaning it might suffice to say that all real teaching must be pervaded by enthusiasm; but it is now better to say that all real teachers must be inspired, in the same sense that biblical teachers and prophets were inspired; that education will fall sadly short of its transforming and creative power unless it is accompanied by a certain noble ardor and elevation of spirit, unless it affects the noble passions and emotions of the learner. Education is shorn of more than half its power when it is addressed to the head to the exclusion of the heart. An educated man is not a mere intellectual gymnast with a large endowment of solid learning, but a man whose emotional and intellectual powers have been duly trained and brought into just equipoise; a man who can not only think, reason and discern, but can love, admire and worship; who can recognize beauty as well as truth, whose highest motives are feelings

tempered with reason. It is in such an atmosphere as this that a teacher should be educated. Nothing less stimulating will serve the noble purpose of his calling.

In the way of facilities for instruction in science, literature and art, the best is not good enough for a school whose high mission is the education of teachers. A good laboratory, a good library and a good art gallery should therefore be thought indispensable adjuncts to a normal school. The world of matter is to be interpreted, the world of letters is to renew the moral life, the world of beauty is to be revealed and admired, and unless these three worlds make large contributions to the teacher's equipment he has not made the investments which become his high office.

While, through delicacy of feeling and breadth of intellectual vision, a teacher should be responsive to the spirit of his age, he should be wisely conservative in his opinions and policy. In no other department of human activity should the maxim *nihil per saltum* be so rigorously construed. Both as a process and a policy education is a growth, and the margin between the work of today and the attempt of to-morrow should be a narrow one. What we now have in theory and practice is the net product of the best thought and truest effort of the past; that it is radically wrong

is inconceivable. Education should be progressive, but this progress should be along historical lines. The future should be a logical evolution out of the past and the present. In this domain revolution is treason. To be swayed about by every wind of doctrine is the mark of an unsound mind. To be absorbed in new and doubtful experiments is to betray a sacred trust. Innocent children should be shielded from the experiments of callow teachers who would use them as material for their "laboratories." It is appalling to think that the normal schools of the country should send out into society relays of half educated teachers devoted to the exploitation of fads, and bent on revolution under the name of progress. The policy of such schools should be a progressive conservatism. They should encourage a hearty respect for the past and its legacies, and should at the same time create an aspiration for a better future. "All the centuries of a nation are the leaves of one and the same book. The true men of progress are they who have for point of departure a profound respect for the past. All that we do, all that we are, is the outcome of secular toil."*

The moral world is passing through a process of

* Renan, *Souvenirs*, XXII-XXIII.

peaceful transformation which is to end, we may believe, in a state of society that is perfect in its kind. This process of transformation is education in its catholic and proper sense. Those who are charged with this supreme mission are the world's teachers; to be fit for this high service their own education must be catholic, wholesome and conservative.

WHOLESOME CULTURE

II

WHOLESOME CULTURE

I FIND a fitting introduction to what I wish to say in this chapter, in the following quotation from an editorial in the *New York Tribune*, on the then recent death of Professor Lincoln, of Brown University:

“Professor Lincoln, who was buried in Providence yesterday, after half a century of active service in Brown University, received during his closing years a unique testimonial of the affection and respect of his pupils. A fund of \$100,000 was raised by the alumni of the college, from which he was to draw an annuity while he lived, and which was to be a standing memorial of his work. It was a remarkable tribute paid to one of the really great educators of New England, and attested the personal appreciation of a large body of students who had drawn inspiration from his nobility of character, his devotion to good letters and his thoroughness and enlightened methods as a teacher. Many college professors there are who do faithful work in their time, and here and there will be one whose memory will be perpetuated after death by the endow-

ment of a new chair, or the naming of an additional building on the campus; but it is almost an unprecedented thing for a body of alumni representing the graduating classes of fifty years to unite with enthusiasm in providing the memorial in the honored old age of the teacher.

“The glory of the mediæval universities was transitory, their reputation and popularity depending upon great teachers who rallied throngs of students around them. One man would make a school of learning famous, and while he lived and taught, the lecture halls would be crowded with sympathetic youths touched by the fire of his earnestness. When he died the university would languish and a rival school with another great teacher would draw upon its resources. Modern colleges are educational machines with too many cogs and wheels to receive the impulse of a single will. One man cannot now make a university as in mediæval times; but an educator of noble impulses and an overmastering love of what is immortal in literature can still be a tremendous force in influencing the labors of colleagues and in directing and quickening the aspirations of students. What Arnold was at Rugby, Lincoln was at Brown, during his half-century of laborious service. Every associate in ad-

joining class rooms felt the stimulus of his enthusiasm for study, and was sobered by his sense of responsibility in training young men for useful work in the world. Every student breathed in his lecture room a higher atmosphere than could be found anywhere else. There was no force in the old college of Roger Williams' state so ennobling and so invigorating as the example and influence of this warm-hearted and full-minded Latin professor.

“Educators, as the world grows older, seem to acquire technique and finish without gaining creative or informing power. There is perfection of system and elaboration of method, but how rare it is to find in school or in college, teachers of the type of Arnold and Lincoln endowed with the incomparable gift of inspiring enthusiasm for learning and good letters! To read Horace's “*Ars Poetica*” or Goethe's “*Faust*” under Lincoln was something more than to master the grammatical difficulties of a language. It was, in Byron's phrase, “to feel, not understand the lyric flow,” to study not the mechanism, but the spirit of a literature, and to be conscious of coming into close communion with intellectual genius. The graduates of the classes in University Hall may have forgotten their rules of Latin syntax and prosody and have mis-

laid their German accent; but whatever ardor they may retain for orderly processes of study or whatever love they may have for what is ennobling in literature, bears the impress of the hand and heart of Lincoln.”

What I admire in this quotation is the thought that the power of a teacher lies in his worth as a man rather than in his skill as a drillmaster, and that his title to a grateful remembrance will at last be found in those services which were inspired by sympathy and affection, rather than in the conscious additions which have been made to the pupil's knowledge. At least the half, and perhaps the better half, of education consists in the formation of right feelings. The great mobiles to action are the emotions. He who teaches us to look out upon the world through eyes of affection, sympathy, charity and good will, has done more for us and for society than he who may have taught us the seven liberal arts. Good teaching, like good preaching or good oratory, must be persuasive. It not only sets forth truth in a clearer light, but will invest truth with a warm halo of feeling.

The school should be strong in the affections of its students. After they have left it their thoughts ought to turn back to the scenes of their school life, to places, persons and associations, with that fondness, affection,

and reverence which children ever feel for the homes of their childhood. The young Alexander loved Philip, his father, but Aristotle, his teacher, was even dearer to him. The most affecting incident in "Tom Brown at Rugby" is the boy's return to the old Chapel, and there alone and in silence, his heart heaving with emotion, kneeling at the tomb of the beloved Doctor. The attachments which a student feels for his Alma Mater are emotional, not intellectual; they relate, not to what he has learned, but to what he has felt. I have seen gray-haired men return to their university after years of absence; but the places they visited, the places to which they are attached, are not the lecture rooms, but the old trees under whose shade they once lounged and chatted, and the playgrounds which once witnessed the friendly ardor of their boyish encounters; and the names which they most fondly call up are not those of their drillmasters but of those whom they learned to love for their good offices and amiable qualities. The heart of Mary Lyon has immortalized Mount Holyoke, and to-day her beautiful spirit is reflected from the faces of thousands who are reproducing her devotion and good works. At intervals during my professional life I have met gray-haired men and women who were

students of the Albany Normal School in the days of its greatest glory, and in the heart of each there was a shrine sacred to the memory of David Page, and the immortality of this great teacher is due, not to his intellect, great as it was, and not to his methods, good as they were, but to the humanity, to the heart, that was in him. The world is to be redeemed, not by change of intellect, but by change of heart; the real leaven of society is charity and good will, not logic, not even liberty and justice. If students are to put this better spirit into the world they must put it into their work; if it goes into their work it must come from their lives, and their lives must borrow it from other lives that have been touched and transformed by it.

We have all heard music that was wonderful in technique, but void of soul. It exhibited the compass and power of the instrument, and the trained deftness of eye and finger, but as it did not proceed from the heart it did not touch the heart. It was not music, but noise scientifically and laboriously produced. The intellect, while "a cold logical engine," may discover truth, but only an intellect warmed by the heart can make truth lovable and therefore persuasive and conquering. There is something to admire in the cold

exactness with which truth is proclaimed from the rostrum, but if this truth is not mixed in due proportion with feeling, there can be no real oratory, for there can be no persuasion.

Goldsmith described the good village preacher as one who "lured to brighter worlds and led the way"; with scarcely a turn in the thought this is a happy description of the good teacher. It was Plato who said that "we do not readily learn from a teacher whom we do not love"; and it is certain that all the great teachers of the world have been men of humane instincts, of warm sympathies and ardent affections, and have owed their immortality quite as much to a responsive heart as to a sound head. It is a sad day for education when the belief prevails that it is only the head which should enter into the service of the teacher, and that a deep emotional nature is a source of weakness rather than of strength. Other things being equal, he is the best teacher to whom pupils most readily turn for consolation and direction in sorrow or misfortune. There is something gravely wrong in that teacher, whether man or woman, who gains no other feeling in his pupil's heart than mere respect.

The tendency of professional life is to break men

up into fragments, to employ one set of faculties or activities while suffering the unused members to languish or perish, and thus to mar the original wholeness of our nature and so rob our service of its normal quality. It should be the whole man who preaches, teaches, pleads, plows, spins, or sings, and we sin against our better nature and powers when we allow any form of specialization to destroy, or even mar, the beautiful wholeness or wholesomeness of our original creation.

All who are engaged in school work may profitably reflect on the dangers of specialization, for the direct tendency is to exalt the instrument at the expense of the man. "Who is that gentleman yonder?" said a traveler to a stranger whom he met on the highway. "That, sir, is not a gentleman," said the stranger, "but a grammarian, and I am a logician."

Nothing more is intended in these remarks than to point out the dangers that beset every man who becomes addicted to a special pursuit or to a special study. Every profession, trade, or calling is narrowing in its tendency and will infallibly dwarf the man who follows it unless he finds relief in some breadth-giving pursuit that is alien to his special vocation. A sinister consequence of this tendency when not thus

checked is to betray us into false judgments concerning other pursuits and other branches of learning. We must all specialize our pursuits by the intensity of our devotion to them, but in some way we must make ourselves so catholic in our sympathies that we shall be able to give a hearty welcome to the favorite pursuits of other men. One of my venerated colleagues in the University of Michigan was an acute metaphysician. While in his library one morning I observed that among his books were the latest and best treatises on physics and biology. When I expressed surprise at this anomaly, his quick response was: "Do you imagine that I am content to be merely a dried up metaphysician?" He had learned the happy art of reconciling breadth with depth.

As the school proposes to train men and women—gentlemen and ladies—rather than grammarians and logicians, it is of the first importance that those who teach should be men and women in this catholic and wholesome sense. I feel sure that my words will not be misconstrued when I say that a teacher's usefulness diminishes in proportion as he sinks into a mere specialist, but that the prime quality of an instructor is breadth of intellectual vision and of scholarly attainments. I have mingled somewhat with college men

and have been an observer of their opinions and ways, but I have only very rarely seen a specialist who had any respect for any specialty save his own. In the main most college feuds and jealousies have their origin in this narrowing of the intellectual perspective, in this contraction of the intellectual horizon; and so it has come to pass that seats of liberal learning are sometimes occupied by men of the most illiberal spirit.

I have spoken of the extension of our sympathies to subjects and pursuits different from and perhaps remote from our own as a necessary condition for high service in a school; and I now wish to speak approvingly of another extension of sympathy and aims which is even more important. My acquaintance with colleges and college men has led me to another observation—that in many cases the instructor's interest in the pupil ceases the moment the recitation period is over; that the instances are rare in which students think of their teachers in any other light than that of drill-masters; and that it is only in exceptional cases that they are held in affectionate and grateful remembrance as friends, advisers and guides. I believe that this is the highest standard by which a school or teacher can be tried.

It is well to recollect that a student does not present

himself to his several instructors in fractions, bringing the logical faculty into one class room, the æsthetic into another, the reminiscent into a third, etc., but that all the powers of the mind are present and in waiting, and that it is but the semblance of teaching which addresses itself to but one mode of mental activity. It is perhaps even more important to remember that the student brings with him his susceptibility of feeling as well as his capacity for thinking—that he can be hurt by harshness and unkindness, and helped by courtesy and gentle speech. The root and basis of character is in the heart, in the depths of the sensative and emotional nature; hence there is no such thing as character-building in teaching which does not address itself to the heart as well as to the head.

It is a mistaken notion that there is something professional in an icy dignity, in rude speech, in uncouth manners, and in austere if not unkind reproof. Anything that distinguishes the teacher from the gentleman or the lady is an evidence of unfitness for this high office; but the gentleman is first of all a gentleman, courteous, kind, considerate, respectful, especially in his dealings with those who by age, position, or acquirement, are his inferiors. *Multa reverentia*

pueris debetur is a very old but a very wise saying: great reverence is due the young.

So far as equipment goes, scholarship, wide and thorough, must be regarded as the teacher's mainstay; he must be a man of learning if he would secure and hold the respect and confidence of his constituents and patrons, and even of his pupils, and without this respect and confidence he can maintain no professional standing, and is likely to abandon a calling in which success requires attainments that he does not possess. If public education is to prosper there must be a permanent teaching class with well defined traditions, rights, prerogatives, and duties, and the members of this class must not only maintain their own self-respect, but must secure public respect; they must constitute one of the learned professions and as such must inherit and transmit all that is implied in professional spirit and standing. I sharply distinguish teachers of this class from accidental, provisional, or non-professional teachers, those who teach for a term or a year through caprice or necessity, without any special competency, and then pass to some regular employment. Money spent on such teachers is in the main wasted.

The professional teacher must be not only a scholar,

but also a man of science; he must understand the principles which underlie the practice of his art, must profess an educational creed, must be versed in some school of educational thinking, must be addicted to some mode of philosophizing on human nature and its wants. I use the term science to designate that special knowledge which is required for the rational practice of the educating art, and which distinguishes the teacher from the scholar, constituting what the logicians call the specific difference between genus and species, between scholar and teacher. In a quasi sense, a teacher's knowledge of subjects, as of grammar, algebra, or latin, is professional knowledge, for he must employ it in the practice of his art, though in another sense it is non-professional, for in this respect a teacher is merely on a par with all well educated men; but a doctrine of education, along with its derived methods of teaching, is professional knowledge in a legitimate sense: it is knowledge which a teacher should be presumed to have, but which a general scholar need not be presumed to have.

There is a radical antagonism between the culture aim and the technical aim, when pursued simultaneously; it is like attempting to weave the fabric and make the garment at one and the same time;

either the fabric, or the garment, or very likely both, will be spoiled. Mr. Bain notes the difficulty of "reconciling the whole man with himself," that is, man simply as a man with man as an instrument. Plato declares that arithmetic as taught to merchants and shopkeepers is incompatible with arithmetic when taught for discipline and culture. For purposes of liberal training, studies should be disinterested, they should be pursued for their own sake and not for the utilities that can be extracted from them. A student is in an unwholesome mental and moral condition when he feels constrained to say of his studies, "How can I turn this knowledge to practical account in the way of earning my bread?" Under such conditions learning ceases to be liberal, it sacrifices freedom and breadth to the exactions of utility. To paint because painting is a delight is a very different thing from painting to earn one's bread; just as the ardor of an amateur is different from the industry of an artisan. Moderate bibliomania is a generous passion, but its virtue can be destroyed by buying books to sell. Speculation soars on free and lofty wings, but it is brought to earth when tied to staid utilities.

The only complete relief from this antagonism between the liberal and the technical is to be found in

making them successive and not simultaneous; in securing liberal training first, and then superadding to it that special training required for the practice of an art. On the Continent, for example, men whose ultimate aim is to become physicians or clergymen first become scholars through the training of the gymnasium and the university; and with this endowment of culture, breadth and discipline, they then apply themselves to the mastery of their chosen profession or calling. In this country a young man enters a law school or a medical college without breadth and culture, learns his art under the stress of these limitations, and enters upon life maimed and hampered in many ways. The professional training of teachers is on a higher plane. Young men and women while gaining their technical training in normal schools are at the same time carrying forward their academic training; and while they rarely become scholars and possess but little of the scholarly spirit, they have at least the rudiments of an education along with some knowledge of their art.

Every consideration disposes me to speak kindly of normal schools and of the men and women who shape their policy and do their work. They doubtless perform a service which could be performed so well in

no other way, and whatever faults affect their work are due to existing conditions that cannot be materially changed. So far as they affect the teaching service of the country, the upper limit of their field falls a little within the high school grade of the public school. Their field is the country school, and in the city school it reaches upwards to the eleventh grade. Ideally, all teachers, of whatever grade, should be scholars both by instinct and attainment; but under existing conditions this ideal is unattainable, and the best professional training that is practically attainable by the great mass of those who teach is doubtless given in the normal schools of the day. Their academic work is mainly of the secondary or high school type, and their technical training is mainly in method and in the elements of psychology. Their courses of study are not in themselves of the liberal type, and they fall still farther short of this end because the student's thought is kept so continuously on the mechanics of his art. The culture aim and the technical aim are in sharp and constant collision, to the great detriment, almost to the defeat, of both. Their technical training is too mechanical, too rigidly exact, seeming to assume that the rules of treatment and construction applicable to matter are also applicable

to spirit. These schools have contributed but little in thought, doctrine or personnel to the permanent teaching profession of the country. If I am not mistaken in my observations, their graduates have made but slight contributions to the educational thought of the day, have shown but little skill in solving the graver problems in public education, and are but slightly represented among the recognized leaders of public opinion in matters of educational doctrine and practice.

When I speak of the imperfections of normal schools I have in my mind the quality of their work as related to what may be called the higher teaching service of the country, or to the teaching profession properly so called. As I view them, these schools fail to meet the needs of this higher service in two particulars: they do not create scholars, and they do not give their students what I have just called *science*. Their aim is so empirical and so practical that culture aims are made impossible. In academic work their graduates seldom reach that stage of growth known as "intellectual emancipation," that stage of learning where the mere drillmaster is abandoned and the student comes into possession of the free and voluntary use of his powers, where learning is a delight and constitutes the natural vocation of the mind. For

anything above routine service, fixed methods of teaching are an obstruction to growth and progress. They absolve the teacher from all efforts at invention and destroy the possibility of his best gift, versatility, the power to adapt himself to new conditions, to recognize exceptional cases, and to rise superior to the iron rule of tradition and routine. For artistic work in teaching, for that spontaneity of effort which is implied in all high service affecting spirit, I think the happiest conditions are these: the zeal of an amateur supported and directed by a knowledge of general principles. Outside of these conditions I see no opportunity for growth. In the lower teaching service it may be that purely routine work is best, but I am now thinking of that higher service to which a college is devoted.

I have dwelt a little on the situation of normal schools, not for the purpose of criticising them, for the uniformity of their organization and the intelligence of those who conduct them oblige me to believe that they respond to existing conditions; but rather to show how very difficult it is to hold the delicate balance between the culture aim and the technical aim, to reconcile the artist with the artisan, the man with the instrument.

THE POLICY OF BENEVOLENCE

III

THE POLICY OF BENEVOLENCE

SCHOOLS exist and are maintained not for the sake of their teachers, but for the sake of their pupils. So far as the prime purpose of a school is concerned the pupil has clear precedence over the teacher. The interest, the needs, the convenience and the comfort of students are to be consulted first, and in all these respects the teacher is to adjust himself to his pupils. A recitation is to be set for a given hour, not because this hour suits the convenience of the teacher, but because it is the most convenient hour for his pupils. Students come to be served, not to serve. Our highest function is that of service to our pupils, in the same sense that the highest office of parents is to serve their children. This is scriptural condescension. The valid ground on which obedience is enjoined on children, pupils and citizens is that docility is the necessary condition of being served. The world's divine Teacher came down to men not to be ministered unto, but to minister. I know how contrary this doctrine is to the assumption often made that the wishes, wants and

pleasures of the teacher stand first, and that the student must adjust himself to the caprices of his instructor. This is no doubt the cause of much of that antagonism between teacher and pupil which in some schools leads to insubordination and riot, and in others to a sort of armed neutrality or smothered spirit of insurrection that is a constant menace to good government.

In some institutions, by what we may call university license, offences are committed against the person, in the way of hazing, which would be counted as punishable crimes if committed outside of college walls. In such cases university tradition is mightier than civil law, and the ordinary processes for punishing crimes are found to be powerless. Now what is the explanation of such facts? I know of but one explanation of this anomaly. In a state of war, deceit, theft, robbery and murder cease to be crimes when they are practiced on the enemy; they in fact become virtues, and are rewarded as such. So in college life, a student who gains an advantage by ruse, artifice, fraud, or force over *his* enemy—his teacher—not only does not lose caste among his fellows, but he thereby becomes a hero if his offence is sufficiently great to attract public notice.

I believe that in all schools there is some shade or degree of this secular antagonism, and that the explanation of this phenomenon lies in some false relation that has been allowed to grow up through years, perhaps through centuries, between students and teachers; and it is my further belief that the fault in this case lies mainly at the door of the teaching body. What is this fault, or, rather, what are these faults? In the main they seem to me to be the following:

Teachers assume too great a difference in rank between themselves and their pupils. In the early days of universities, when the little learning that existed was a monopoly of the clergy, the pride of letters put an almost impassable gulf between the teacher and his pupils. The teacher was a prince, a ruler, made such almost by divine favor and appointment, while his pupils were his vassals, his subjects, made such by their ignorance and dependence.

In some quarters there still exists university courts, university codes, and even university prisons; and it is not long since the university whipping-post has passed out of use. The severity of the old-time school and college discipline is notorious; it was harsh, often cruel, and at times inhuman. Harsh family discipline

is offset and tempered by that respect and affection which spring from kinship, and resentment, if ever felt, soon dissolves under parental tenderness and benevolence; but the wounds left by tutorial punishment do not readily heal; the scar that was left on the twig remains on the tree. Whatever the original cause may have been, the fact remains that there is an inherited tendency on the part of students to look upon teachers as their natural enemies, just as a brood of chickens, anterior to experience, is terrified and scattered by the shadow of a swooping hawk. The distance between teacher and pupil is even lengthened in modern times, especially in public schools, by the fact that children are taught in such masses that direct contact is made well-nigh impossible, and hence all education, in its true and deeper sense, made equally impossible. This isolation of pupil from teacher I count as the radical vice in school administration. It makes sympathy either difficult or impossible; and lack of sympathy breeds distrust, dislike and even defiance. In American colleges and universities the faculty is the college court, but a court of anomalous constitution, its members being at once prosecutors, witnesses, jurymen, judges, and in their corporate action, executioner. By a further anomaly the student

is tried and convicted in his absence, and so, without the privilege accorded to the worst of criminals in civil courts of introducing evidence in his own behalf and of cross-questioning the evidence brought against him. Is it any wonder that students distrust decisions of such a court? Is it any wonder that they are restive under a system of government which appears to them little less than an oligarchy, and that they sometimes resort to measures, fair or foul, which have in them some promise of protection or relief?

For this evil of the first magnitude there are two means of relief, and of these I now wish briefly to speak.

Evidently our first duty is to descend somewhat from the heights of our assumed superiority, and to regard our pupils more as our equals in point of social position, moral worth, general intelligence and honesty of purpose. Our pupils are our inferiors only in knowledge and experience, but this is a difference in degree, not in kind, and merely signifies that we are a body of learners aiming at the same goal, some only fairly started, others in the heat of the race, and still others, perhaps, in sight of the prize which lies at life's close. The fact that we are all learners should stamp such a corporation of teachers and students with

the seal of unity and equality. This was the original idea of a university, a corporate body of learners in which the more proficient taught the less proficient as a sort of payment to the future for a debt incurred in the past. This is the meaning of the device we love to honor: EDUCATION IS A DEBT DUE FROM PAST TO FUTURE GENERATIONS.

This fact of virtual equality should be instructive in more ways than one. Are we sensitive to the good opinion of others? So are our pupils. Would it shock, mortify and hurt us to be reproached in public or in private for our ignorance or our stupidity? Our pupils are similarly hurt, for their feelings are as acute as ours. Do we find it hard to bear our daily burdens when ill, or in trouble, or in sorrow of any sort? So do our pupils. Are our burdens lightened, or our backs strengthened, by a kind word or an approving smile? They, too, are affected and helped in a like manner. Do we who are older and wiser and stronger stand in need of charity, forbearance and mercy? So should we be kind and merciful to those who are presumably weaker and less wise. And we need not fear to face this question of equality in its other phase. If the faults of our pupils are to be noted, corrected and possibly punished, so may not our own faults be

subject to some process of reproof and amendment? As our pupils are not above correction, so neither are we.

Another fact must not be overlooked. Many students, perhaps the most of them, labor under some stress of circumstances, some *res angustæ domi*. It is home sacrifice that allowed them to enter school, and it is still home sacrifice and personal sacrifice that keep them there. I well know that the issue of this burden-bearing is strength, a higher and better type of manhood and womanhood, and that a life of ease is not a thing to be desired; but we may at least forbear to place on willing shoulders any unnatural or unnecessary burdens, and may employ our best efforts and wisest, kindest plans towards fortifying our pupil's ability to do and to dare, to suffer and to bear. In Fuller's quaint phrase, we may "strengthen the back" even if we cannot "lighten the burden."

The second measure of relief which I propose is a college court of equity, as distinguished from that college court of law known as the Faculty. Students have some ground for looking on the Faculty as a sort of Star Chamber, where their fate is determined within closed doors, and in a manner more or less arbitrary. Virgil's *varium et mutabile semper* might

aptly be applied to this college court. In its hearings and decisions a Faculty is merely a large jury, and juries are untrustworthy in proportion to their size, because individual responsibility becomes smaller as the divisor becomes greater. Safety lies in fixing responsibility on an individual or on a small number of known individuals. In such cases evidence will be weighed with extreme care, and decisions will be made with extreme caution. At best a college Faculty is a court of law in which decisions are reached through forms and processes more or less arbitrary and inflexible. Mere law as distinguished from equity is heartless, unfeeling, unsympathetic; and it not infrequently happens that a decision may be strictly legal, but at the same time unjust. This fact has become so apparent in the history of judicature that courts of equity have been established to supplement courts of law, so that appeals may be taken for review to a smaller jury where justice may be tempered with mercy and where the letter that kills may be offset by the spirit which gives life. It is no doubt best that the college Faculty should remain, in the main, what it now is, a court of law, but with the necessary proviso, that it is supplemented by a court of equity. If, in the final summing up, it appears that a student lacks merely a poor



one-fifth in the requirements for graduation, it is just and proper that the Faculty should follow the strict letter of the law and deny him graduation; but in this and all similar cases there should be the privilege of appeal to a higher court where the decision of the lower tribunal may be reviewed in the light of equity as well as of law. I see no good reason why the course of college judicature should not be substantially the same as that of civil judicature. Experience has shown in the last case that there must be channels of appeal from lower tribunals to higher, to the end that injustice and oppression may be prevented by appealing from the tyranny of form and the prejudice of passion to the wider principles of jurisprudence and the larger precepts of equity. I feel sure that such a system of college judicature would commend itself to the student body and would prevent that suspicion and alienation which tend to maintain a gulf between it and us. A college judicial system might be composed of three courts as follows: The Faculty, or court of law; the executive committee, or court of appeal; and the president, or court of equity, the court of last resort. Neither of these lower courts should be suspicious or envious of the one next above it, through the feeling that its own prerogatives may

be set aside, or its own dignity compromised. Neither of these bodies should assail the decision of another, but in thought and speech should confirm it. In this way each court will become conservative and safe and the whole system sound and beneficent. There should be an organization of Faculty and students into one compact, harmonious body, living and acting in a concert undisturbed by suspicious or rival interests, and ambitious only for the common good. In other words we want, in the best and completest sense, a college commonwealth, a true republic of letters, where, through community of interest and vocation, teachers and students shall be wrought into one corporation for the promotion of knowledge and virtue.

The other fault which I shall notice is this: *The assumption that college administration should illustrate the law of the survival of the fittest*, that the mediocre and the dull should be forced or crowded out, and that only the bright and the brilliant are worthy of the teacher's efforts. Stated in these plain terms, no one will acknowledge that he justifies such a policy; but practically the colleges and universities whose avowed or implied mission is a "standard" conduct their teaching and examining on this hypothesis. Just what I mean will become plainer if I

state what I think should be an axiom in college administration: THE WORTH OF A SCHOOL IS DETERMINED, NOT BY THE FEW WHO SURVIVE THE RIGORS OF ITS DISCIPLINE, BUT BY THE MANY WHO ARE MADE TO THRIVE ON ITS NURTURE. The feeling is widely prevalent that a college is open only to the select, the elect, that it is closed to minds of the common mould, that it is an institution set apart, if not for the aristocracy of wealth, at least for the aristocracy of intellect. I incline to a wholly different view. A college should be democratic in its aims and methods, it should be open to the poor and the lowly, it should afford an opportunity for the common mind to add to its powers and its stores, and its usefulness should be measured by the breadth of its helpfulness and not by the height to which it can push exceptional talent. Who may be admitted to a college? He who is likely to profit by the advantages which it offers. Who may be retained in a college? He who is making an honest and profitable use of his time and talents. Who may be removed from college? He who misuses his time and opportunity, or who is unable to profit by the advantages offered him. As there are diversities of gifts, so there will be diversities of improvement. In a class of twenty there may be twenty grades of

scholarship, and still each student may be in his right place; just as in a church there may be an audience of a thousand, and while no two hearers are equally edified by the sermon, all are profited according to their several ability. A teacher's power is to be estimated, not by what his best pupils do, but by what the more poorly endowed are enabled to do by his inspiration and aid. Dullness and ignorance are misfortunes to be patiently relieved, not offences to be summarily punished. Diligence and good intent, even when associated with dullness, are cardinal virtues to be respected and rewarded. The false ambition of teachers to set up standards entails countless miseries on the timid and the weak. Generally speaking, colleges are conservative and careful; but overdriving is not unknown, and one of the last lessons for some instructors to learn is to assign lessons of reasonable length, and to recollect that other teachers are entitled to a fair share of the student's time. Instances have occurred in which the lessons assigned in one class, if well learned, would require three-fourths of all the student's available time. Under such an unmerciful stress, students will either bolt or break, and the student of finest fiber will break first. Some years ago a high spirited, ambitious and most benevolent

student began her work in college with high hopes. She soon began to feel the pressure of inordinate tasks and sharp reproof. She made heroic attempts to recover lost ground and lost favor, but her burdens became heavier and her powers of resistance feebler. Near the close of the first semester, broken in health and in mind, wounded in spirit, she returned to her home to nourish resentments which were too well founded to be argued away. This case of overpressure was not the result of any intent, but was the consequence of a policy whose faults I am now trying to expose. Teachers without nerves do not readily sympathize with students who have nerves. Teachers whose feelings for any reason have become callous, sometimes make cruel assaults on the sensitiveness of diffident and deserving pupils.

By way of summary and conclusion :

The general fault in college administration which I have here pointed out, and for which I am trying to find a remedy, is not peculiar to any one school. It is a fault so general that the hope of extirpating it may be a chimera, but we may at least hope to reduce it to its minimum degree of evil. This fault is the secular antagonism between the student body and the teaching body. I call it secular because it is as old

as universities themselves. I want to see these two interests fused into one so that the school shall be an organic whole, made such by perfect harmony of conduct and intent, instead of a house divided against itself. The cause of this breach of harmony lies mainly in the teaching body. If students are suspicious and resentful it may be because they have been treated with some measure of harshness and injustice. A school should develop docility, responsiveness and loyalty in its students. With the rarest of exceptions, they deserve only kindness, courtesy and hearty respect, and need no other stimulus than mild and deserved commendation for perseverance under difficulties.

In conclusion what better counsel can I give than this from *Sartor Resartus*?

“‘My teachers,’ says he, ‘were hide-bound Pedants, without knowledge of man’s nature, or of boy’s; or of ought save their lexicons and quarterly account-books. Innumerable dead vocables (no dead language, for they themselves knew no language), they crammed into us, and called it fostering the growth of mind. How can an inanimate, mechanical Gerund-grinder, the like of whom will, in a subsequent century, be manufactured at Nürnberg out of

wood and leather, foster the growth of anything; much more mind, which grows, not like a vegetable (by having its roots littered with etymological compost), but like a spirit, by mysterious contact of Spirit; Thought kindling itself at the fire of living thought? How shall he give kindling, in whose own inward man there is no live coal, but all is burnt out to a dead grammatical cinder? The Hinterschlag Professors knew syntax enough; and of the human soul thus much: that it had a faculty called memory, and could be acted on through the muscular integument by appliance of birch-rods.

“Alas, so is it everywhere, so will it ever be; till the Hodman is discharged or reduced to hod-bearing; and an Architect is hired, and on all hands fitly encouraged; till communities and individuals discover, not without surprise, that fashioning the souls of a generation by knowledge can rank on a level with blowing their bodies to pieces by gunpowder; that with Generals and Fieldmarshals for killing, there should be world-honored dignitaries, and were it possible, true God-ordained Priests, for teaching. But as yet, though the soldier wears openly, and even parades, his butchering-tool, nowhere, far as I have travelled, did the Schoolmaster make show of his

instructing tool; nay, were he to walk abroad with birch girt on thigh, as if he therefrom expected honour, would there not, among the idler class, perhaps a certain levity be excited?'''

TEACHING A SPIRITUAL, NOT A
MECHANICAL, ART

IV

TEACHING A SPIRITUAL, NOT A MECHANICAL, ART

OFTENTIMES the best instruction is that which is merely suggestive. It commends some theme for reflection, and leaves each mind free to do its own thinking and to come to its own conclusions. This mode of procedure is particularly necessary when mature minds are dealing with those complex and many-sided questions which are connected with practical education. However long and patient our thinking may have been, it is not very probable that any of us have looked through and entirely around even the simplest question involved in the educating art. It is by a division of labor that these problems are finally compassed. Men severally look at the different phases of a complex question, and thus by discussion, comparison and ultimate agreement, there results a composite view of the truth more or less perfect as the thought has been catholic, penetrating and judicial.

It is worth while to remind ourselves that the problem of human education is one of the very earliest

that taxed the ingenuity and wisdom of thinking-men ; and that this theme has been a favorite topic of discussion by the most learned and the most saintly men in all ages of the world. The most interesting and the most instructive chapter in the general history of the world is that which relates to the rise, progress and fate of those countless systems which have been devised for the education and training of the young. This is no less than the history of civilization itself, and exhibits man's power, by deliberate thinking, over the destiny of the race to which he belongs.

Family pride, based on noble living and virtuous achievement, is one of the most wholesome and inspiring emotions of the soul. It puts a precious heritage in the keeping of each new generation and reinforces individual worth and power by the worth and power accumulated and capitalized through generations of noble lives. Virtue thus becomes a tradition and an inheritance, and their possessor is placed on vantage ground that may insure victory in the race of life. 'Pride in one's professional ancestry is a kindred emotion, and any calling which inherits noble traditions will have a following of superior spirits. To be ashamed of one's calling is to confess defeat, and in some measure to deserve it, for one of the first

rules of living is to shun any occupation into which one cannot put one's whole soul. When oppressed with the routine cares of my profession I find reinforcement and relief in the thought that the masterpiece of the world's master thinker, Plato, is a treatise on education, and with the pages of the incomparable "Republic" before him the teacher may feel a conscious pride of calling which will make him step lightly over the vexations that sometimes embarrass his steps. Can we ever forget that the highest office ever conferred by heaven on mortals was to be the teacher of men? The essence of real preaching is effective teaching, and we miss the grandeur of the teaching office if we fail to see that the ministry of the schoolroom is as sacred as the ministry of the altar.

With respect to their influence in raising the tone and type of human thought and life, occupations naturally fall into three categories or classes—those which degrade and corrupt, those which are merely neutral or conservative, and those which, by their positive and aggressive character, lift the race to higher and higher planes of thinking and living. In other terms, some men employ their activities in making the world worse, and if their numbers were not restricted and their influence checked and counter-

acted the race would lapse into beastliness and infamy ; other men receive from society the best it can give, return to it a fair equivalent for what they have received, and leave the world in the same condition as though they had never lived in it ; while others, and this by far the smaller number, return to society much more than they take from it, transform the common things of life into things of noble nature and use, and leave the world a better and a happier place because they have lived and labored in it. By slothful and wasteful tillage one farmer will impoverish and ruin a field that nature had blessed with fatness ; another will hold an even balance between waste and repair, and in the end will leave his fields neither better nor worse for his occupancy ; while a third will develop the hidden resources of the earth, will transform air, rain and sunlight into orchards and herds and harvests, will fill his barns with the precious fruits of the earth, and will leave his fields endowed with tenfold fertility through his creative and transforming power.

By means of human industry, art and genius, the material world is passing through a series of transformations which in the end will amount to a re-creation. Fertile and populous Holland, reclaimed from the sea, is the type of what civilized man is doing all

over the face of the earth. Literally the wilderness is being made to blossom as the rose. Deserts are being converted into arable and productive fields; mountains are brought low; the deep places of the earth filled up; pestilent marshes are drained and cultivated; treasures hidden under the mountains since the morning of creation are unearthed and converted into beauty and power; and over the earth and the sea, and through the air, men are constructing numberless highways for the transmission and diffusion of wealth, comfort, intelligence and happiness. In an analogous way the moral world is passing through a series of upward transformations towards peace, charity, brotherly kindness and righteousness, and in the end, we cannot doubt, there will be a new people for the new earth; the world of matter and the world of spirit will have been changed from one glory to another till the thought of God for man and his dwelling place shall have ended in its perfect realization. Taken in its broad but legitimate sense, this work of re-creation or restoration is the final aim of education; and the glory of the teacher's calling is that it is the agency by which human society is to be lifted to higher and higher planes of physical, mental and moral perfection. Of the three categories of

occupations just noted, the educating art belongs pre-eminently to the third and highest—its aims are beneficent and beneficent only.

“Teaching,” says Mr. Fitch, “is the noblest of professions, but the sorriest of trades,” and in speaking of the dignity of the educating art, I have associated it with all that is best in mind, heart and character. “A teacher,” says Rousseau, “what a noble soul he ought to be!” Education might be defined as the art of moulding or transforming character, and the teaching which is tributary to this high art must be an alliance of intellect with heart. There is much teaching that does not take hold on character; it leaves the heart untouched and so leaves the springs of conduct unaffected. Into teaching which effects the ends that education has in view, there must be infused generous measures of honest affection. Magnanimity, benevolence and moral courage are three requisites for attaining real success in the educating art, and the whole process is spiritual to an extreme degree. Plato, and Ruskin after him, make teaching a process of eliciting; Emerson calls it provocation; and some have represented it as induction, as when President Garfield speaks of a college as consisting essentially of two things, an impressible boy on one

end of a bench and a Mark Hopkins on the other. It suffices to place a bar of soft iron in the near presence of a magnet in order to cause it to take on magnetic qualities. We call this induction, and it is by an analogous process that children become generous, magnanimous, noble and scholarly, by absorbing the qualities from those who are highly charged with them. This amounts to saying that education is character-building, and as character is affected chiefly by character, all that is best in life and letters should enter into the spirit of the teacher. It was once said of a very beautiful and accomplished woman that to be on terms of close friendship with her was a liberal education; and it is certain that the near presence of a scholarly man or woman is more potent than text-book or lecture can be in the production of manly or womanly character. Perfunctory teaching that begins and ends merely with a didactic lesson falls sterile on the sensitive soul and leaves nothing which makes for righteousness and peace. Good teaching must have much of the persuasive power of oratory. It must kindle enthusiasm, establish motive, fortify the will and inspire the soul to noble acting. When the boys at Rugby saw the face of Dr. Arnold looking kindly and approvingly on them from his study window as

they swayed and struggled in the quadrangle below, they were affected by the same impulse to heroic achievements which urged on Napoleon's soldiers at the battle of the Pyramids. In this sense every great teacher is a great captain; he prevails more by his presence and example than by any set lesson in science or letters. I think we must all lament the decay of discipleship, that ardent affection which attaches pupil to master, and that devotion which espouses his cause and propagates his doctrines. Teaching that does not end in some degree of discipleship is lacking in one essential feature, for Aristotle has observed that we do not readily learn from one we do not love. The modern doctrine that the pupil must early become independent of his master, must become a law to himself, and espouse only his own opinions, though true to a certain extent, sacrifices the dearest element in education, the guiding, moulding and transforming power of a serene and cultured soul.

There is much in modern education which encourages the purely mechanical aspect of teaching, which regards the child as a piece of matter to be trimmed and fitted into regulation shape, which deals with free and versatile spirit as the artisan deals with senseless wood and iron. This danger has always been abroad

in the world, but it has become imminent and actual in this age when children are taught in masses under machine pressure, and when products are to be turned out that must fit into prescribed places. It seems to be a very general law that the first stage in the evolution of human organizations is the mechanical; that before they emerge into the perfect law of liberty they must suffer a bondage to harsh and unfeeling prescriptions; that routine and rule must for a time usurp the place of spontaneity and reason. Christianity had such an evolution, and it is not singular that education, falling perchance under the fashioning of coarser hands, should obey the same tendency. The coming era in the history of public education in the South is the era of the graded school, for it cannot be doubted that in the lifetime of some of us every city and every village in this vast domain will have its "people's college," its graded school, free and open to all who choose to enter it, and offering to rich and poor an education which, a century ago, could have been obtained only by the privileged few in a college or a university; for the first-class high school of to-day is superior to the college of the last century. I know the graded school too well to speak of it slightly, and I am too good a friend of it to ignore or deny a

danger which besets its administration. In dealing with masses of children, as with masses of men, there must be order, precision and prompt obedience to authority, and in a school, as in an army, there must be a certain amount of routine and a certain degree of mechanism. The type of school organization is doubtless military; there must be subordination as well as coördination; there must be one responsible head, and there must be a downward distribution of authority through subordinates, whose jurisdiction becomes smaller as their number becomes larger. But while the mechanical is thus a necessity, it should not absorb the working power of the organization. The machine does not exist for itself, as superintendents sometimes seem to think, but for the inner life which it embodies and manifests, and which alone gives value to its crude tenement. More than one man whose dull sense sees only the outward has become enamored of the smoothly working machine which he calls his school. I once visited a graded school which moved with the fatal accuracy of clockwork. At recess the three hundred or four hundred pupils marched down to the playground with military precision, and an inflexible rule would have carried out a line of children into a pelting rainstorm, for the symmetry of the parade must

not be marred for health's sake. While the sports of the play-ground were at their height the bell struck, and instantly every arm and foot and feature became fixed in the very attitude in which it had been caught, as though petrified or frozen by the sudden summons. After a moment's suspense another signal was given, the dispersed columns were reformed, and the pupils returned to their places in military order. I soon discovered that this man's power was very largely absorbed in his darling machine, and that the life of his school was lean and thin and sickly. Up to a certain point organization promotes life, growth and development, but beyond this point it absorbs and neutralizes the vital forces and tends to impoverishment and death. I have seen farmers whose revenues were so absorbed in buildings, fences, gates and machinery, that the downward road to ruin was rapid and inevitable. The soul will live on friendly terms with a body that is normally developed, but the athlete soon becomes an animal, and then the soul shrivels and perishes. The ancient Greek teachers knew this, and held that gymnastic exercise was not for the body, but for the soul, and that it was necessary to maintain the physical and spiritual in a state of delicate equipoise.

The school, like the soul, must have a body or

tenement in which to live and through which to manifest its life and power; but the mere domicile may absorb so much time, attention and money that the school itself may be lean and languishing. I have known ambitious towns having a population of a few thousand, out of sheer rivalry with wealthier places, to build magnificent temples of learning and bequeath a heritage of taxation to succeeding generations. Almost immediately this burden of debt would begin to gall and vex, relief would be sought in a reduction of salaries and necessary working expenses, till the soul of the school was starved and shrunken. Where heroic and devoted teachers have remained at the post of duty under this adverse stress the burden of debt has virtually been shifted to their shoulders; for what has been saved out of a just remuneration has gone to liquidate a debt unwisely contracted by the public. No one will for a moment call in question the advantages of commodious, well-arranged and well-equipped school buildings; and in structures built at public expense and for public use the public school should outrank all others; but any expenditure in brick, architecture or adornment that cripples the intellectual and spiritual resources of the school is not only bad economy but a great public wrong.

I have just noted the fact that a teacher may so expend himself and his resources in mere discipline that his real usefulness as an instructor may be destroyed; but the fact deserves notice how mere love of precision and mechanical order may lead to downright cruelty. It is a good thing by the use of all fair measures to reduce tardiness to a minimum, but some teachers stake their whole reputation on the absolute prohibition of this evil. They make tardiness a simple impossibility by closing and locking the doors the moment the hour for opening school has come. This was the rule in a winter school in a distant State. At 9 o'clock the outer door was locked. A few minutes later two little children, a brother and sister, belated by a long walk over roads blocked with snow, came to the door with hands and feet benumbed with cold. Being unable to enter, they stood shivering on the steps till finally a lady who was passing in a cutter took them in and carried them to her own fireside. This, doubtless, is an extreme case, but it illustrates the vice of that mechanical discipline which would sacrifice health, comfort and reasonable freedom to the vain show of mere routine.

I repeat the thought that there must be a certain amount of mechanism, and even routine, in every

school organization. Viewed externally, a large public school with its companies and regiments of children supervised and governed by a chief and his subordinates is a machine, and a very complex one; but whether this mechanism shall promote and facilitate the intellectual life within or shall obstruct and pervert it—all this depends on the manner in which the school is administered. There is doubtless a disposition among schoolmen and teachers to trust too much to the working power of mere machinery, just as men may depend too much on the mere church for personal salvation; and in this formative period in the history of public education in the South it cannot be amiss for us to guard against a danger that has beset the older systems of public instruction. We are to recollect that the public school is everywhere coming to the front, and that with us, as with all the progressive people of the world, it is coming to stay. The State has become a public educator, and the public school has the right of eminent domain. The typical school of the future is not the private academy nor the school that is half free and half public, but the public school, free and open to all, graded and supervised by public authority, and taught by men and women whose qualifications have been tested by official inspection.

TEACHERS TO BE EDUCATED, NOT
TRAINED

V

TEACHERS TO BE EDUCATED, NOT TRAINED

IF I were asked to define the mission of a normal college, my definition would be this: *To aid in the formation and recruitment of a teaching profession which should devote itself to the cause of public-school education.*

As between public education and private education, the former has the right of eminent domain. The modern State, as a measure of self-preservation, has made itself a public educator. Education has become a branch of the public service, maintained and supervised at public expense, and teachers are State officials, acting under legal sanctions, and paid, at least in part, out of the public revenues. There is no interference with schools conducted by individuals, or by religious denominations; but the State has such a vital interest in the quality of its citizenship that it has become the dominant patron of education. The South is now in a state of rapid transition from private education to an education prescribed and supported by public au-

thority; and the great problem of the day is the creation of a teaching class competent to administer this branch of the public service with intelligence and skill.

There never will be a teaching profession in the exclusive, compact sense in which there is a legal or a medical profession. Teaching is a profession of the military type. As all who bear arms are not professional soldiers, so all who teach are not professional teachers. In both cases there is the regular and the volunteer, the former educated at some West Point, the other trained for a brief service in some camp by official experts. The regular has a vocation, and remains permanently in the service of his country; the volunteer's service, however valuable and important at the time, is merely an incident in his career. The institute, the training class and the county normal school are in scholastic life what the soldiers' camp is in military life; while West Point and Annapolis are typical of the higher institutions devoted to the education of professional teachers, the characteristic feature of whose course of study is the history and science of education.

As I understand it, the prime function of the normal college should be the education of professional

teachers, as distinguished from the training of volunteer teachers; or, in more definite terms, the preparation of men and woman to become teachers and guides, endowed with powers of initiative and command, rather than the preparation of men and women to do the more mechanical work of the schoolroom.

Of course all the men educated at West Point do not become actual military leaders, but the course of education is such as to make of every man a possible leader—the typical quality aimed at is leadership. Similarly, the aim of normal schools of the higher type is leadership; and, while it is not possible for all their graduates to reach this high vocation, it being dependent on circumstance as well as on ability, those who fall short of it are still qualified for efficient service as subordinates.

It goes without saying that the prime, the fundamental qualification for teaching service of high value is scholarship. It is true that there are some poor teachers who are good scholars, certain moral or mental defects operating to defeat success; but it is certain that no one need hope for permanent and growing success in the teaching profession without the instincts and habits, and some of the attainments, of the real scholar. To secure and retain professional

standing, a teacher must earn the confidence and respect of the better educated people in the community in which he lives. The vocation of teaching will not become a recognized profession until in the popular mind the terms "teacher" and "scholar" become synonymous. It is a very significant fact that the "trained" teacher adds little to the repute of the teaching profession, it being understood that "training" at best implies mere technique, or manual dexterity, and carries with it the suspicion of shallow learning; just as elocution, the noble art of vocal expression and interpretation, has fallen into disrepute through the performances of young persons who mistake sound for sense and gesticulation for eloquence. The spirit of the age has set in strongly towards the mechanical, the empirical, the practical. This spirit has become rampant in normal schools. Teachers are no longer to be educated, but "trained;" and this "training" is to be done in "laboratories," where students are encouraged to operate on children. The inevitable but deplorable consequence of this fad is that normal schools have lost the respect of educated men, and it is very commonly taken for granted that a teacher "trained" in these schools is a man or woman of slender scholarship, who expects to succeed

by "devices" and "methods." There seems to be but one way to rescue the vocation of teaching from this false position, and this is to return towards the older conception that a teacher must be a gentleman and a scholar. Over the entrance of every normal school there should be this legend: "TEACHING: THE NOBLEST OF THE PROFESSIONS, BUT THE SORRIEST OF TRADES."

For the reasons here set forth in outline it should be the purpose of a normal college to make some degree of liberal learning the professional endowment of each graduate; to hold fast to the doctrine that teachers are to be educated rather than trained, and that scholarly habits and instincts are of more value than empirical devices and methods. Seeing that the teachers are the real guardians of the State, why should we set for them a lower standard of attainment than that which Plato prescribes for the guardians of his ideal republic? "Lovers, not of a part of wisdom, but of the whole; who have a taste for every sort of knowledge and are curious to learn and are never satisfied; who have magnificence of mind, and are the spectators of all time and all existence; who are harmoniously constituted; of a well-proportioned and gracious mind, whose own nature will move spon-

taneously towards the true being of everything; who have a good memory, and are quick to learn; noble, gracious, the friends of truth, justice, courage, temperance." *

Surely this ideal is scarcely attainable in any school of the present, but it may be approached; and who will say that it is not wise to lure our pupils forward as far as possible on this pleasant way?

But a school may be addicted to liberal learning of this high type and still not be a school for the professional education of teachers. A teacher must first of all be a scholar both in attainment and spirit, but in addition to that knowledge which every well-educated man should possess, he must also have that special and specific knowledge which distinguishes the teacher from the mere scholar. All the professions stand in the same case. The lawyer, the physician, the clergyman, must be scholars, but each must also have that special knowledge which fits him for the practice of his profession—knowledge which educated men in general need not have. There is knowledge of this specific sort for the teacher's professional use, and it is this which differentiates a normal college from a college of the ordinary type. The history and the

* "Republic" (Jowett), 475-487.

science of education; the principles of school organization and school management; the science of education values; school hygiene and school legislation; the construction of rational courses of study for schools of various grades; the principles of school supervision—these and kindred subjects comprise a vast field of study and constitute a body of special or professional knowledge of larger volume than that which enters into the education of the clergyman or the lawyer. It should be a distinctive aim of this college to communicate to its students as much of this knowledge as its teaching force makes possible.

It is believed that the best way to teach a liberal art is to teach the essential doctrines and principles that underlie that art. Law, medicine and theology are taught on this plan. It is legal science that the student learns at the law school; and it is out of this science, on the occasion of actual experience, that he must evolve his art. At the medical college it is the science of medicine that the student learns. He may visit patients with his preceptor, and may witness surgical operations at the clinic; but while a student, he is not allowed to administer medicine to the sick, nor to practise surgery upon the wounded. It is out of his science and his observation, when his profes-

sional course is terminated, that he must evolve his art. In those vocations in which the hand is principally concerned, the handicrafts and trades, an art is doubtless best learned empirically, by assiduous manual practice; but in those higher employments where the major or exclusive effort is mental or spiritual, an art is best learned by first compassing the science which underlies it. Now teaching is an almost purely spiritual act or art, scarcely involving the manual or muscular dexterities at all, but in its real essence closely akin to the supremest of human arts, the art of lofty living; but it is the procedure in all ethical systems first to master a theory of life, and then to evolve out of it, through daily experience, a corresponding art of living. The Sermon on the Mount is pure precept or doctrine, first promulgated and learned on authority and then expanded into all the phases of righteous living. "First know and then do," was one of the oldest and wisest precepts of Greek philosophy, and it would be well if we could turn aside from such misleading cant as "We learn to do by doing," and recast our modes of teaching on the basis of a principle that is catholic and statesmanlike. Whether in the making of a horseshoe or in the construction of a treaty, the point of departure is knowledge; and as

we rise in an ascending series through the grades of activity lying between these two extremes, the empirical element in instruction gradually diminishes until in the last member it dwindles to the zero point. In the category of human activities teaching is to be classified with statesmanship rather than with blacksmithing.

A school of children is now universally regarded as a necessary adjunct to a normal school. In most cases this supplementary school is employed as an experimental or practice school (known in *fin de siècle* terms as a "laboratory"), in which students are supposed to serve a sort of apprenticeship in teaching; while in other cases it is simply a well-organized and well-taught school, in which students observe models of good school work as done by competent teachers, and known as a model school, or school of observation. Such a school should be employed, not as a practice school, experimental school, or "laboratory," in which students experiment on children and thus "learn to do by doing," but as a school that may serve students as a model which, in whole or in part, they may reproduce in their own practice, and which represents to them, in the concrete, what the theory of the school had before represented to them in the abstract.

My objections to the use of the supplementary school as a "laboratory" are as follows:

A school taught by a rapid succession of pupil teachers cannot be a school worthy of imitation and reproduction.

Insistence on technique tends to defeat the culture aim of education. If study is to beget scholarly instincts and habits, knowledge must be pursued for its own sake, in an atmosphere of freedom and repose.

The formal prescriptions and arid criticisms of the training school foster a dreary and lifeless routine that defeats the main purpose of education—the love of learning and the quickening of the intellectual powers. Teachers and pupils attain freedom only through truth, and the larger the truth the greater the freedom. Rules have their place in education, but they should follow principles, not precede them, and much less supersede them. When teachers are very ignorant, rules are doubtless more serviceable than general principles; but in a school where professional teachers are being educated such ignorance is not to be presumed.

Except under extraordinary conditions an experimental school cannot give to students what may be called an experience in the honest sense of this term, much less an amount of practice equivalent to an

apprenticeship in teaching. After what term of service may one be called an experienced teacher? The very lowest minimum that would seem to me to justify such a declaration would be ten weeks or fifty days of five hours each, making two hundred and fifty hours in the aggregate. Let us suppose that there are five teachers employed in the model school, each devoting three hours a day to practice work. This would yield seventy-five hours a week, three hundred hours a month, or two thousand four hundred hours a year. Supposing again that one hundred students share this opportunity, the maximum experience of each student is only twenty-four hours, or less than five days. This is probably not an unfair picture of the average normal school. If this be true, it would, therefore, require a school of ten times this teaching force to afford the students the minimum of practice that would constitute an experience in teaching. I know of no normal school provided with a supplementary school large enough to furnish its pupils with enough practice work to constitute a real experience in teaching. It is almost a pure illusion to regard a few days of such practice work as a training in the art of teaching.

At best, the conditions under which this experience is gained are so peculiar, so abnormal, that it may

fairly be questioned whether it is not a disadvantage rather than a real help. There is no virtue in experience *per se*; it may be very helpful or it may be very harmful, all depending on the conditions under which it takes place. In order that a young teacher may turn his experience to profitable account, the following conditions should be supplied: The school, or the class, should be his own; he should work in the light of some clearly conceived principle; there should be present to his mind some ideal as a model for imitation; he should work with composure, with nothing to stimulate his self-consciousness; whatever criticism is passed on his work should be sparing and judicious, and administered in private.

In the practice school the class taught by the student is not his own; it very recently came to him from a fellow-student, and will soon pass into the hands of another student. He teaches in the presence of official critics, pencil and note-book in hand, who are present for the express purpose of criticising, and who, therefore, *must* criticise. These critics being his fellow-students, what probability is there that their criticism will be just and wise? Besides, what chance is there that the work of this tyro will be done with serenity and composure? What veteran teacher would expect

to succeed in the presence of four or five official critics? I have witnessed this practice teaching in normal schools of the best class, and I have purposely understated the adverse conditions under which students attempt to learn the art of teaching in these pedagogical "laboratories."

An easy calculation has shown that a supplementary school of children cannot furnish our large classes with practice work enough to constitute even the semblance of real experience, but it is large enough and complete enough to serve as a concrete whole to be observed, studied and imitated. This is the original notion and intent of a *normal* school; that is, a school organized and taught in such a way as to serve as a *norma*, measure or pattern, by which its students are to try their own schools.* Naturally, students will teach as they have been taught, and their first impulse will be to make their schools like the one with which they are most familiar; and if the students of a normal school were all destined to organize normal schools of their own, no other rule or pattern would be necessary; but as other and different schools will require their skill, a supplementary school for observation and

**Normal School*, a school whose methods of instruction are to serve as a model for imitation (Webster).

study becomes a necessity. Without such a corrective and guide, a college education might disqualify a student for work in a primary or a secondary school. The importance of having a wholesome school, well graded, well governed and well taught, as an organization to be studied and comprehended, will readily appear when it is recollected that probably three-fourths of the students had never seen such a school previous to their entering college. To all such a model school is a concrete, living object-lesson.

In the school, as in the Church and in the State, there is the conservative party, holding that the roots of all true progress reach far back into the soil of the past; that there should be no break in the continuity of life; that a better future is to be a gradual and equable evolution out of a good past; that the first duty of the reformer is to interpret with becoming reverence and modesty the past achievements of the good and the wise: and the radical party, holding that revolution is the main instrument of progress; that the first and main duty of the reformer is to destroy; that each new generation must discover for itself by experiment and induction the principles of human conduct; and that universal unrest is the sign and condition of human progress.

Listening merely to the noise that is made in the educational world by the loud-voiced and not over-modest reformer, we might conclude that the school is in a very bad way, that nothing has really been settled in the way of principles and methods, but that the whole scholastic *régime* is to be created *de novo*. A striking phenomenon of the times is a rapid succession of educational fads, some philosophical, some methodical, some enduring for a season, others disappearing after a fitful effort to maintain an existence. A favorite vocable to conjure with has been "Apperception." It is sufficiently vague to be attractive, and sufficiently indefinite to accommodate different shades of interpretation. Competing, but less fortunate fads, have been "Concentration," "Interest," and "Congruity." These form a sprightly troop of hobbies, each for a season the favorite of an enthusiastic group, but all the subjects of unforeseen and vexatious mishaps. No one can predict the events of the coming season, but the course will certainly have its varied attractions. This is the way we go; but what a pity that the noblest of the professions should be subject to such ignoble conditions of growth!

Just now the hobby of the normal school is the so-called "laboratory." This term, deliberately chosen,

marks the height or the depth of the experimental method as applied to education. The name is pathetically suggestive. Children are *material*, and on this material young men and women are to operate for the double purpose of making discoveries in infant psychology, and of learning the art of teaching by the experimental method. As vivisection, so much in vogue in biology, rediscovers from year to year, at the cost of numberless lives, what is well known in physiology; so the "pedagogical laboratory" rediscovers truths in the mental life that in one form or another have been well known for centuries. It is barely conceivable that, after countless experiments and disasters, some essentially new truth may be added to what is already known; but it is infinitely more probable that in each bushel of new chaff there will be found only the one grain that in kind is as old as the Pharaohs and their mummies.

It is so easy to assume that there are no ancient landmarks which our forefathers have set! So modern and so scientific for each callow scholar to mark off the highways of knowledge with milestones of his own devising! But the supreme pity is that this laboratory method as applied to education may become sporadic, and so, little by little, unsettle and corrupt public

opinion as it bears on human interests of such infinite moment that no method should be tolerated which is not conservative and cautious. Seeing that education is the architectonic or master art, it should be the most conservative of all the arts; of all human institutions the school should be the one the least addicted to change, the least exposed to innovations. To be conservative is to be neither stationary nor retrogressive, but to be wisely circumspect and cautious while adapting old methods to new needs. It is the school that is piloting the race across the centuries, and its hands should ever be held firmly on the helm, and its eyes steadily fixed on the compass. In such a voyage experiments in navigation are not only perilous, but criminal.

EDUCATION ACCORDING TO NATURE

VI

EDUCATION ACCORDING TO NATURE

HE would do the world no mean service who would write an impartial history of fads, showing the rise, progress, termination and results of each. Such a history would doubtless discover to us the fact that even the thinking world is addicted to hobby-riding, and that successive fads are the rungs of a ladder on which thought ascends from lower conceptions to higher, and thus gains wider and wider horizons of truth. What were nominalism and realism but philosophical fads, engrossing men's thoughts for a season, kindling the controversial spirit up to the fighting point, then waning in interest, and finally giving place to other fads? Phlogiston, Malthusianism, Darwinianism, the nebular hypothesis, phrenology, Christian science and hypnotism are phenomena of the same sort. These are all "guesses at truth." Their devotees, indeed, regard them as truth itself, but successive thinkers finally separate the grains of pure metal from the larger volume of alloy, garner the precious residue into the general storehouse of science and then make a venture at new guesses. The line of Sherman's

march to the sea is now marked by abandoned forts, exploded shells and half-filled trenches. So the triumphal march of thought is marked by abandoned hypotheses, exploded theories, and empty conjectures.

The same phenomenon is observable in the special science to which we are addicted. Men of my years have lived through a succession of educational fads, and our predecessors, near and remote, were doomed to traverse a similar route. Within our own time object-teaching rose in the East, if not as the sun, at least as a star of the first magnitude, but its distinctive light has been lost in its passage across the horizon. Then appeared other lights, from time to time, great and small, to which we did homage, such as manual training and the inductive method; and now the suns or meteors that are in full blaze on our pedagogic firmament are "concentration," "apperception," "interest," "congruity" and "a pot of green feathers."

We are not to forget that the monitorial system swept over the country eighty years ago like an epidemic, and that it took such a stalwart as De Witt Clinton clear off his feet. The head that could project the Erie canal could also utter such a wild prophecy as this: "I recognize in Lancaster the benefactor of the human race. I consider his system as creating a

new era in education—as a blessing sent down from heaven to redeem the poor and distressed of this world from the power and dominion of ignorance.”* Returning to the figure just employed, Lancastrianism was a blazing comet, creating a profound sensation at the time of its appearance; but it speedily burned out, leaving hardly as much as a poor cinder by way of remembrance.

In place of fad I might have used the word craze, or hobby, but fad is the newer term, and I use it to denote a wide class of phenomena, social, political, philosophical, educational and even religious. I use the term in a more serious sense than the ordinary, to indicate a phase of thought that, while serious, is at the same time partial and shallow, and, in its appearance and disappearance, epidemic.

It will be readily guessed that I include “Education According to Nature,” or “Follow Nature,” among educational fads. In the sense just stated, I do; only “Nature” must be considered as the most respectable of these fads, by reason of its antiquity and longevity; though sometimes, as in the case of Joseph Payne and

*S. S. Randall, “History of the Common Schools of New York,” p. 28.

other imitators of Mr. Spencer, the whole treatment is little better than cant—shallow and offensive.

The precept, "Follow Nature," is prevalent in ethics, in education, and in medicine, where Nature is set up as a criterion of right and wrong, of true and false. A practice that is supposed to be in conformity with Nature is thereby proved to be right, or true; while a practice that can be shown to be contrary to Nature is assumed to be wrong, or false. Thus, Aristotle defends slavery because it is "natural," some men being born to rule, others to serve, some being strong, others weak; while he condemns usury, or the taking of interest, because it is "unnatural." Flocks and crops springing from the soil are wealth proper, and for convenience they may be converted into money; but to produce money from money, a dead thing from a dead thing, is unnatural, and therefore wrong. "Down to the Norman conquest the Britons had 'living money' and 'dead money,' the former being slaves and cattle, the latter metal." Our modern temperance reformers use the same argument. Alcohol is an evil, because it is produced by the decay or rotting of a natural product, as corn, rye, or wheat; though just

why vinegar should escape condemnation is not at all clear.

Peter the Great suffered a similar delusion when he ordered his naval cadets to use sea water for drinking purposes. Is not the sea the natural domain of the sailor, just as the land is the natural domain of the soldier? The sailor must therefore adapt himself to his environment; he must draw his sustenance from the elements on which he lives. Had Peter taken wise counsel before giving this order, he might have been reminded that it was a scientific error to include sailors and saltwater fish in the same category; but he was following Nature, as he supposed, and his cadets had to perish.

The same false analogy betrayed John Locke into his "hardening process." Men in a "state of nature" wear no shoes, and though their clothing is very scant, even in winter, they adapt themselves to rigors of temperature without harm; my young gentleman should therefore follow Nature rather than art in the matter of clothing, and so should wear no shoes; but as he is compelled to live in society, we will strike a compromise, and he may wear shoes, provided they are plentifully supplied with holes.

The phrase "Education According to Nature" at

once suggests the name of Rousseau, for it was he who, in his "Emile," fairly set the fashion for subsequent writers on education, great and small. Mr. Spencer adopts the new fashion, and his pages are overshadowed with capital N's. He accepts the new mythology, writes out a new creed, and virtually founds a new school of theorists. No theologian was ever more dogmatic. He postulates Nature as an infallible guide, and then deduces educational processes with almost mathematical precision. Whatever will not fit into his system, as history, he conveniently rejects.

Rousseau was essentially a pessimist, placing the Golden' Age in the distant past rather than in a distant future. Civilization, so-called, was full of perversions and defilements; the arts and sciences were instruments of corruption; and the only salvation for the race was a return to primitive simplicity and purity. As the main principle of political philosophy was the assumption that society was retrograding because it was receding from Nature, he readily adopted the conception that the salvation of society lay in a new system of education, whose purpose should be to bring men back to Nature, and thus to purity and to peace. The myth Nature dominated Rousseau's thought, or rather his feeling; for he felt rather than reasoned.

Everything must be "natural," even his children. Like Mr. Spencer, though in another manner, Rousseau was a rhetorician, enamored of the sound of his own voice; such rhetoric is always fatal to logic. He carries conviction, as the advocate or the orator does, by enlisting the feelings on his side of the controversy. Hence, his "Emile" is a romance, and the characters that appear in it are as unreal as any that one may find in modern fiction. And yet it is not a contradiction to say of it what Rousseau himself said of the "Republic:" *C'est le plus beau traité d'éducation qu'on a jamais fait.*"

Though Rousseau nowhere defines Nature, it is not difficult to understand the general sense in which he uses this term. His whole creed is virtually contained in the opening paragraph of the "Emile": "Everything is good as it comes from the hands of the Author of Nature; but everything degenerates in the hands of man. He forces one country to nourish the productions of another; one tree to bear the fruits of another. He mingles and confounds the climates, the elements, the seasons; he mutilates his dog, his horse and his slave; he overturns everything; he loves deformity, monsters; he will have nothing as Nature made it, not even man; like a saddle horse, man must be trained

for man's service; he must be made over according to his fancy, like a tree in his garden."

In other terms, restore the world to the condition it was in before it began to be modified by man's agency, and we have it in its ideal state, "the state of Nature." Relieve a modern garden from human interference, and it will soon revert to a state of nature. Natural fruit is better than fruit that has been cultivated. The ideal horse is the wild horse. The ideal man is the red Indian. Education is not an ascent from wildness, but a return towards wildness. Rousseau admits men to his state of Nature provided they make no attempt to refashion one another or to modify their environment. The moment they begin to do this, perversion sets in and art usurps the place of Nature. This perversion of Nature by art has gone to the greatest length in cities. Hence, relatively, we return to Nature when we go from the city into the country, as from Paris to the woods of Montmorency.

How much of this is rhetoric, and how much sober conviction, it is doubtless impossible to tell with any exactness. In construing Rousseau's theory we must make some allowance for temperament, and also for the extravagances into which reformers invariably fall. Over-statement is an element in a reformer's

outfit, whether it takes the form of a satire, as in Rabelais and Dickens, or of fiction and fancy, as in Rousseau. All an interpreter can do is to trace the main lines of the argument and show the limitations of the theory by typical examples. This I will attempt to do in the sequel.

The practical application of Rousseau's theory is well exhibited in his doctrine of discipline by natural consequences. Through wilfulness, Emile breaks the windows of his chamber. His father replaces them, but the boy again breaks them. The transgressor is thereupon turned over to the relentless laws of Nature. The windows are not replaced, but the boy is confined to his room, where the cold wind blows on him by day and by night, thus exposing him, not only to discomfort, but to danger; he might take a severe cold and die of pneumonia. The great danger of this exposure occurs to Rousseau, but he promptly replies that it is better to die of a cold than to be a fool! In the case of Emile, however, matters do not come to this sad pass, but he is finally conquered by suffering the disagreeable consequences of his own folly and reforms in a manner befitting the author's theory.

The application of this doctrine is extended still further. To cure Emile of his vanity and forwardness,

he is allowed to compete with a professional juggler, who readily makes him the laughing-stock of a jeering crowd. To teach him worldly wisdom and caution, he is allowed to fall into the hands of sharpers and cheats, who fleece him in fine fashion; and, finally, to make him virtuous, he is allowed to fall into vice—he is drawn through the mire in order that he may afterward be washed and experience the sensation of being clean. In outline, this is Emile's course in experimental ethics.

Though Rousseau, as before noted, does not define Nature, he makes it quite easy for us to infer what he means by the term, and a proximate definition would stand about as follows: The material world affected by physical forces (gravity, heat, light, electricity, etc.,) and inhabited by uncivilized men.

For purposes of right education, Emile is to be pushed as far back as possible into this primitive and uncorrupted world; and society itself, in order to be rescued from growing corruption, must make a return toward this primitive simplicity and perfection. This was Rousseau's ideal education and his ideal state of society; but he had the sense to know that these ideals were impracticable, and so he accepts a compromise. He uses consummate art to reproduce a *quasi* state of

nature, but this more than Herculean effort involves him in countless contradictions, absurdities and follies.

Mr. Spencer personifies Nature, and thus carries the myth to its most perfect development. With him Nature is physical force personified, and education is experience, or contact with environment. His general theory may be summarized as follows: The individual of to-day must be educated just as the race was educated historically; the race was self-instructed through experience; the individual must therefore rely on his personal experience for his knowledge and training. As Nature was the tutor of the race, so Nature must be the tutor of each individual of the race. Of course, in accordance with this theory, the knowledge that is of most worth is science, for science has grown out of the experiences of the race—is, in the Aristotelian sense, a natural product—and is knowledge that can be reproduced and verified by each succeeding generation of learners. Past experiences constituting what is commonly known as history cannot be thus reproduced and verified, and therefore history is not knowledge proper. And as literature—a play of Shakespeare, for example—cannot be rediscovered or reproduced according to the Spencerian dogma, there is no natural place in this system for literature and kindred

subjects. Literature is too much tainted with art to fit into a scheme of education according to Nature.

Like Rousseau, Mr. Spencer is clearest when he applies his hypothesis to moral education. Prior to experience, an infant, if permitted, will put its little fingers in the flame of a candle. Let it do this, advises Mr. Spencer, even though a painful blister is the consequence. According to the same method the child may lay hold of hot fire-bars and spill boiling water on its tender skin. In this fashion the infant is being educated through experience by its godmother, Nature. This is a reappearance of Rousseau's doctrine of consequences. From this point of view education may be defined as experience coming from contact with matter and with physical force, or in shorter phrase, with one's environment.

It may be urged against Rousseau and his disciples that the Golden Age of society is not in the remote past, but in the future—that humanity is making a forward movement, slow, perhaps, but sure; that what we call civilization will not be abandoned for savagery; that cities, Rousseau's especial abomination, are both a product and an agent of civilization; and that his assumption of the nobility of primitive man is an unsus-

ported fiction. The untutored savage, as seen and described by travelers, is Nature's handiwork, a fair specimen of what she can do in the way of educating when unassisted by human art. It has not been observed, however, that men are made either happier or better by being allowed to revert to a state of nature.

Again, a proper conception of Nature will include man, his endowments and his works. Is not man as natural a product as a beaver or a horse? If instinct is a natural endowment of the beaver, why are not reason, imagination and language also natural endowments of man? Why make a radical distinction between the defenses built by beavers and the defenses built by men? Why is it less natural and right for men to live in communities than for bees and ants? Why is not a poem as natural a product as a bird's nest?

When Mr. Spencer asserts that "humanity has progressed solely by self-instruction,"* he either falls into an obvious error or he uses terms in an extraordinary sense. It would be as true to assert that humanity has progressed solely by capitalization. Men capitalize their experiences in labor-saving machines and in proverbs. One generation invents a snare, a trap, or a

hook; the next generation is spared the effort of making these inventions, but simply accepts and uses them, and devotes the time and effort thus saved to the making of other inventions. Experience begets wisdom, this wisdom is embodied or capitalized in proverbs, and then these proverbs serve other men for warning and guidance in place of wasteful experience. Humanity has never squandered its time in reinventing and rediscovering. The "genesis of knowledge in the race" takes place through capitalization and discovery, and thus understood, it is quite true that the individual must follow the same course. Mr. Bain is evidently right in declaring that the assumption that the child's education is to be in the main a process of discovery or of rediscovery is a "bold fiction." In some subjects, as mathematics and physical science, rediscovery is conceivable, but, in the main, impracticable; while in others, as history and literature, it is impossible, if not inconceivable. Mr. Spencer's hypothesis of Nature as the true guide in human education easily runs into the *reductio ad absurdum*. Let us see where this specious hypothesis will land us.

This Nature is simply brute matter or brute force, absolutely divested of feeling, without sympathy and

without pity; the teacher should therefore be the personification of brute, unfeeling force.

In her distribution of pains and penalties Nature never distinguishes between innocence and deliberate transgression—the same punishment falls on the infant as on the hardened criminal; the teacher is therefore to take no account of motive, but must regard the fact of transgression only.

Nature makes no distinction between a block of wood that falls from the roof of a house and a child that tumbles from a chamber window—for her use they are merely two pieces of matter, which she treats in the same manner, or, if she makes any distinction at all, she favors the block of wood, life and feeling here being at a discount; children should therefore be manipulated, shaped and governed as though they were inert, senseless matter.

There are no gradations in Nature's lessons; she deigns no explanation, she is as silent as a sphinx. The graded school is therefore unnatural, and the teacher should be merely a stern and silent monitor.

I call attention to these absurdities, not because they are sanctioned by Rousseau and Spencer, but because they show the near limitations of this specious doctrine of Nature. Both these writers set up Nature

as a criterion and guide, and they quote her in a free and easy way as standard authority for certain educational processes. Their argument runs in this wise: "Nature does so and so; therefore we should do so and so." But, evidently, this Nature does some things that no sane or moral man should ever think of doing. Mr. Spencer allows a little child of three or four years to lay hold of hot fire-bars with his little hands, but objects to his playing with an open razor. It is plain, therefore, that Nature is not to be followed at all lengths. Who is to decide how far, or in what cases, we are to follow Nature? Some who have had larger experience in the management of children than Mr. Spencer has probably had, would stop short of the fire-bars and the boiling water. It is a reasonable presumption, therefore, that we are not here dealing with science, but with opinion; and that it is an open question, not only how far we should follow Nature, but whether we should follow her at all; seeing how unnatural she sometimes is and how questionable some of her proceedings are.

Instead of accepting the poetical fiction that Nature (still using the term in the Spencerian sense) is our goddess and our guide, some of us who have not the fear of the new mythology before our eyes would

respectfully maintain that this same Nature, in some of her work, should be disinfected, deodorized, and otherwise prevented from doing her worst. Only give her a fair chance, and Nature, in the form of scarlatina, diphtheria, or cholera, will decimate whole villages and cities. In such and all similar cases Nature is a remorseless, relentless fury, who is to be pursued, captured and thrown headlong into the sea and miserably drowned. In other terms, and dropping the figure, the joint work of Christianity, science and civilization is to subdue Nature, to make her man's servant rather than man's master, to make her minister to his joys rather than to his sorrows. There is to be a new earth, rescued from Nature and transformed by human art, and it is to be peopled by a race recreated by education and the gospel; and throughout this secular process the dominant force is to be the human intelligence and the human will. The Nature that we are to follow is "Nature humanized," or "Nature informed with humanity," to adopt the happy phrase of Richard Grant White.

So far, the treatment of my theme has been negative, in the main; the purpose being to show that the hypothesis of Nature as a faultless paragon is subject to grave limitations; that this general doctrine is very

far from being safe and wholesome; and that, like all other fads, it seizes upon a fraction of a truth, fancies that it is the whole truth, and then proclaims the new marvel to the world with a cackling of delight.

I will now venture on a more positive treatment of this theme, and, putting entirely aside whatever is mystical or mythical, will try to state in plain prose some of the things that seem to be implied in education according to Nature. I hope my readers will do me the favor to remember that my purpose in this discussion is not controversy, but the discovery of truth. I aim at nothing more than interpretation. The writers who invoke Nature so persistently and so freely make no attempt whatever to define the term; they leave their readers to interpret the word for themselves.

In dealing with the precept "Follow Nature," the task of the interpreter is twofold: (1) To determine what Nature is and what she does; and (2) to determine whether it is wise to follow her in the cases stated. At this stage of educational science it is high time to disregard fiction, myth and personification, and to give to this vague term an articulate meaning. My interpretation of the term Nature may not be the correct one, but it is an honest effort to reach the truth.

Those who reject any given interpretation owe it to the cause they are attempting to serve to state in plain terms their own interpretation.

The one word that most nearly interprets Nature, as it seems to me, is experience, and to follow Nature is to make experience the sole or the main source of our knowledge and discipline. It is usually said that there are two sources of knowledge—experience and language; but the precept “Follow Nature” forbids the intervention of language as a source of knowledge, and makes the process of learning a course in personal experience. Experimental knowledge, it is claimed, is the only real knowledge; all we truly know is included within the circle of our personal experiences, of our sensations, and of the inferences we draw from them. Rousseau sequesters Emile, so far as possible, from the society of men, in order that he may be tutored by Nature; that is, by experience. Instead of the mother, Mr. Spencer makes the candle flame, the fire-bars, and boiling water the teachers of the child.* Primitive man, we are told, had no teacher but experience; the successive generations of men have gained their knowledge in the same way; experience is there-

fore the typical process of human education, the only royal road to learning.

A few tests applied to this theory would seem to show its general unsoundness. Is history knowledge? On the hypothesis that the real test of knowledge is experience, there can be no such thing as historical knowledge, for we cannot be brought into personal relations with the events which have given rise to history.

Is our knowledge of geography limited to what we have learned by travel? May we be said to know anything of the countries we have never visited? I once had a pupil who was a thorough convert to the Spencerian doctrine that there could be no knowledge where there was no personal experience. "Have you ever been abroad?" I asked. "No." "Then do you know that there is such a city as London?" "No." "How would you gain this knowledge?" "I would go there." "How would you know when you reached there?" So authority confronts us on every hand—the new theory broke down at this point.

Again, on this hypothesis, what is the function of

books? Possibly Mr. Spencer may have learned all his philosophy from his own observations and reflections; but, on his own hypothesis, why does he write so many books for other men to read? Scholarship and culture have always meant and will ever mean a loving devotion to good books.

I venture to say that the following statements are substantially true:

The process we call civilization is the triumph of art over Nature, and is a mark of human progress. Men will not renounce the essential concomitants of civilization and revert to a state of Nature in pursuit of happiness or moral good. The men of each new generation will start forward from the vantage ground secured for them by their predecessors on the earth. They will accept and use the labor-saving machines which they inherit from the past, and, without wasting time and strength in the effort to reinvent, they will capitalize their own experience and wisdom in some other or better labor-saving devices.

The knowledge gained by experience and experiment is capitalized and transmitted in books, and the great mass of men in each new generation will gain their knowledge by the interpretation of the books left by the wise and the good. The pretense lately set

up, that students in science are to gain their knowledge inductively, by personal research in the way of rediscovery, is a shallow fad. It would be just as reputable to counsel men to construct their own almanacs. Try to imagine a class of even university students attempting to rediscover the atomic weight of chlorine, or even the specific gravity of iron! If we commit ourselves to such folly at all, why not be radically and consistently foolish, and set about reinventing the apparatus of the modern laboratory? Students should certainly have some training in physical manipulation and experiment, not on the pretense of rediscovery, but rather as a means of initiation into the processes of modern scientific research. The culminating absurdity of this doctrine of rediscovery is vivisection, which, as practiced in all ordinary cases, is nothing less than a crime.

Can virtue, in an intelligible sense, be capitalized, transmitted and taught, so that in the moral life each generation may start from a higher vantage ground; or must we be remanded to an experimental ethics, as our reformers would remand us to experimental science? This question cannot be argued at this time, but a little reflection will show that the world can grow better only on the hypothesis that the attainment

of virtue is made somewhat easier for each succeeding generation. In other words, virtue can be taught; each child is not to construct a code of ethics out of his own experiences, but is to accept the highest code of ethics that humanity has bequeathed to him.

Interpreting Nature in the sense of experience, or contact with environment, which is the prevailing sense in which Rousseau and Spencer use this term, and speaking only for myself, I find but little that is really helpful in the stock precept "Follow Nature," save this: It serves to keep alive the fact that learners are ever in danger of mistaking words for things, and so guards us against an education that is purely "*livresque*," as it has been styled. Thomas Hobbes uttered the same caution when he declared that "words are wise men's counters, but the money of fools."

I find much more help in a side conception which appears in the "Emile" as a sort of undertone—that there is an imminent tendency of civilization toward a distracting and unwholesome complexity, and that the need of the age is a return to simplicity. Rousseau's illustration of his meaning is very happy. Speaking of teaching children to read, he says: "We no longer know how to be simple in anything. Look at the machines we invent for teaching children to read—cabi-

nets, charts, and what not—all useless lumber. We do everything save the one thing essential, creating in the child a desire to read; do this, and all methods are good." As I interpret this phase of Rousseau's educational philosophy, it is this: Follow main routes; abandon bypaths; strike at creative motives; occupy strategic or dominant positions. Educate as artists paint—begin with broad stroke, leaving details for after consideration. Imitate the unity of Nature, and, instead of reducing a child to fractions, treat him as an integer, making his education wholesome and humane.

The stress we put on training is the symptom of a general unsoundness. A trained horse or a trained pig is not a normal and wholesome horse or pig, but an animal artificially shaped and fashioned into a fraction or fragment. A thin glaze of bookkeeping converts an ignorant boy into a writing or adding machine, and unfits him for the functions of a man proper. Teachers are now being trained rather than educated, and these fractions tend to perpetuate fragments. The one great merit of the kindergarten is that it keeps children whole and allows them to grow by an organic process into symmetrical units. The danger of the graded school, and even of the college,



is stratification—the deposition of knowledge in layers by specialists; and the remedy for this and kindred evils is a return to a wholesome simplicity of Nature—to an education according to Nature.

In a more specific sense, we follow Nature when we adapt our instruction to the organic mode of the mind's activities. The mind is an organism having its own predetermined mode of activity. This constitutes its nature; and when we respect this order of procedure in the presentation of knowledge, we may with scientific accuracy be said to follow Nature. When the mind works naturally—that is, in accordance with the laws of its organization—it proceeds from aggregates to parts, from the vague to the definite, and, in childhood, from the concrete to the abstract; and the teacher follows Nature when he allows the mind to elaborate its knowledge in this order.

In conclusion, I venture to offer this bit of advice to those who are trying to make of their teaching a rational art: In your thinking and writing never allow yourself to personify the term Nature, but leave the mythologist, the poet, and the novelist in sole possession of this deity.

A THEORY
OF EDUCATION VALUES

VII

A THEORY OF EDUCATION VALUES

THE thesis that I aim to present is as follows: Studies serve three main purposes and therefore have three main values. They serve for discipline, as a mental gymnastic; they endow the mind with instrumental knowledge, or knowledge for guidance; and they serve for delight. Studies will thus fall into three classes, corresponding to three mental needs—disciplinary studies, instrumental studies, and culture studies.

In the prosecution of this inquiry, we shall be well started on our way by recollecting that studies have their distinctive qualities or properties, just as minerals, vegetables and other natural substances have. In its characteristic qualities history is as distinct from algebra as bread is from quinine, and it would be as gross an error to prescribe history at random as to prescribe quinine at random.

And another thing, about as obvious, is also true. It is just as easy to discover the characteristic qualities of studies as of minerals and vegetables. In both cases we may proceed in one or both of two ways. We may

examine the thing itself and thus discover its nature or properties, or we may examine its effects when applied to use, and in this way discover its nature or properties. Whenever the results of these two processes agree, we have absolute proof that our conclusions are valid. The mechanic, wishing to construct a plow beam, has before him two pieces of wood, oak and whitewood. He need never have made plow beams out of these two kinds of wood to know that oak is fit, and whitewood unfit, for his special purpose. Just so experience in results is not needed in order to distinguish a training subject from a culture subject; a critical examination of the subjects themselves is quite sufficient to determine that point. Still, the consensus of enlightened opinion as to the observed results of studies is a valuable aid in determining education values, for it cannot fail to be true that the long-continued observation of educated men as to the actual outcome of various studies, mathematical, linguistic and scientific, should be substantially accurate, just as the collective opinion of medical men as to the effects of drugs must be accepted as trustworthy by the students of medical science. This inquiry does not lie in the region of hypothesis and conjecture, but in the clear field of science, where certitude is possible.

The science of education values is both qualitative and quantitative—qualitative in an exact scientific sense, and quantitative in the same sense that the temperature of water is quantitative: high or low, as determined by a thermometer.

It is only this science of values that can furnish rational answers to such questions as these: On what ground has the study of algebra been made universal in our high schools? What rational defense is there for the study of the classics? Such inquiries arise with reference to every subject that is taught in our schools, and if education is ever to become a rational art, there must be established a science of education values, just as there must be a science of food values before there can be a science of dietetics.

The question of method is also involved in this inquiry. If two teachers of chemistry, or of literature, hold different views as to the major purpose of these studies, they will follow different routes and therefore adopt different methods. It is to be assumed that each instructor knows the major effect of his subject, and therefore its major value, for on no other assumption can he be presumed to concentrate his skill in such a way as to make his art effective. Nay, how can a teacher be said to have an art unless he keeps clearly

in view a definite end to be reached? The first element in school economy is therefore a knowledge of the value of studies.

In this discussion two facts will be assumed, as follows:

Every subject has some major or characteristic value, and also one or more subordinate or minor values. This major value is its normal or natural value, a value inherent in the subject itself, resulting from its very constitution and not created by human device. By express effort, or through ignorance, a subject may be perverted from its natural use, and what is essentially a minor value may be made a major value, and thus its wholesome effect lost. Thus, what is naturally a culture subject may by perversion be made a disciplinary subject, and so lose its major value. Perversions in use usually follow this line; they are all lapses into training.

The second fact to be assumed is that the future vocation of students is unknown, that their education is general or liberal, and not special or technical. The whole scheme of values is disturbed the moment we come to deal with students who are studying for special vocations. We must assume that we are serving the intellectual and moral needs that are common to

all men, quite regardless of their special vocations. All men, regardless of their special occupations, must be taught to read and write, for these instrumental arts are necessary to the conduct of life; but, for practical ends, chemistry need not be taught to all men, since the world may be served by a few chemists, as it is served by a few doctors and lawyers.

This is one of the oldest of speculative questions. Plato discusses the education value of arithmetic, geometry and dialectic, and Aristotle, of music and painting; and in modern times the subject has been taken up anew by Lord Bacon, Dr. Whewell, Sir William Hamilton, Alexander Bain and Herbert Spencer. Only two of these writers attempt any classification of studies, Lord Bacon and Dr. Whewell, and of these classifications Lord Bacon's alone is sufficiently analytical to be scientific and valuable. His well-known statement is as follows: "Studies serve for delight, for ornament and for ability. Their chief use for delight is in privateness and retiring; for ornament, is in discourse; and for ability, is in the judgment and disposition of business." In substance, and with a little modification, this is the classification that I shall propose.

I suppose no one nowadays would recommend a

study merely because it is "ornamental;" that is, because it will enable one to shine in conversation. But if we construe the term "ornamental" in a wider sense, so as to include the art of pleasing, the studies that serve this high purpose have a legitimate place in a scheme of values, and will be considered in another place. It is equally obvious, from the phraseology and from the context, that Bacon includes two things under the term "ability"—a habit or disposition of mind expressed by the term "judgment," and the turning of a study to practical account in the "disposition of business." When he says that "studies serve for delight," he evidently refers to the contemplative pleasures that come from a well-furnished mind. With one retrenchment, and with this legitimate amplification, and expressed in modern terms, Lord Bacon's classification stands as follows: Studies serve three main purposes, and therefore have three characteristic values. They serve for mental discipline, for guidance in affairs, and for contemplative delight, and therefore have three normal or natural values: (1) Disciplinary, (2) Practical, and (3) Cultural.

I. *If the Iron be Blunt, and he do Not Whet the Edge, then Must he Put to More Strength.*—That

Bacon fully realized the disciplinary value of studies is abundantly shown by the following statement: "Histories make men wise, poets witty; the mathematics subtle; natural philosophy deep; moral; grave; logic and rhetoric able to contend. *Abeunt studia in mores* (studies terminate in manners). Nay, there is no stound or impediment in the wit but may be wrought out by fit studies, like as diseases of the body may have appropriate exercises. Bowling is good for the and reins, shooting for the lungs and breast, gentle walking for the stomach, riding for the head, and the like. So, if a man's wit be wandering, let him study the mathematics, for, in demonstrations, if his wit be called away never so little, he must begin again. If his wit be not apt to distinguish or find differences, let him study the schoolmen, for they are *cymini sectores*. If he be not apt to beat over matters, and to call up one thing to prove and illustrate another, let him study the lawyers' cases. So, every defect of the mind may have a special receipt."

In this notable quotation we have the clearly cut conception of study as a mental gymnastic. The general philosophy that underlies this fact is easy to discover. Milo, the athlete, as Quintilian affirms, by lifting the calf day after day, was, in the end, able to

lift the ox. Mind and muscle agree in this fact that, by being taxed, they acquire new power and skill, and this is what we mean by discipline. When the mind is engaged in study, its powers are necessarily taxed, and the reflex effect is discipline, so that all studies must have some kind and degree of disciplinary value, the kind and degree depending on the nature of the study and the intensity of the effort. Mathematics and history call into exercise different modes of mental activity, and therefore produce different kinds of discipline. Again, in some cases, the mind works at high tension, at a white heat, under the whip and spur, while in other cases it is in a quiescent, almost passive state, very like the state of a sensitive plate in a camera, receiving impressions rather than creating them. In respect of mental tax or tension, the difference between reading Kant's Critique and Dickens' Oliver Twist is immeasurable, very like the difference in respect of muscular effort between climbing the Alps and gliding through the country in a palace car. The reflex effect of this tax is what we call discipline, and is subject to the following law: *If the reflex effect is to be cumulative, the tax must be cumulative also, the utmost that a uniform tax can do being to preserve the status quo.* To resolve the quantity $x^4 - y^4$ into

its factors for the first time requires considerable effort, and this effort yields considerable discipline; but the repetition of this analysis for the thousandth time endows the mind with no new power. *C'est le premier pas qui coute*. This principle shows us the wisdom of allowing students to struggle with difficulties, assisted, at most, by suggestion, and the folly of making his tasks easy—of converting work into play.

The conception of power and skill, as aims of discipline, admits of some analysis, as follows:

Insight or penetration: the power to make a mental analysis of a phenomenon and to discover its secret cause; as, *e. g.*, the motive which underlies human conduct.

Comprehension: the power to classify phenomena or facts according to their essential marks, and to deal with wide classes rather than with single instances.

Versatility: the power to apply general principles to the solution of new cases, or to meet vicissitudes with composure and success; fertility in resources.

Good judgment: the ability to see things in their true relations, and from these relations to draw correct conclusions.

Discrimination: the power to note minute but essential differences, to look below surface resem-

blances, and to distinguish from one another objects seemingly alike.

Mental, like physical gymnastics, aims at wholeness, soundness, perfection, at what is hale, hearty and robust. To this end it must curb an exuberant faculty and stimulate to activity a faculty that is either weak or dormant. It is true alike of mind and of body that "unto every one that hath shall be given; but from him that hath not shall be taken away even that which he hath." When, by nature or use, a mode of activity has become easy and therefore pleasurable, it makes its way with an ever swelling tide, and drains other modes of activity of their just opportunities. That a student has a marked predilection for a certain study is proof that his mind is a facile instrument in one main line of activity, and may be a valid reason why he should be excused from this intellectual pursuit; while marked unsuccess in another study indicates a dormant or undeveloped faculty, and may be a valid reason why the study should be maintained, even under painful pressure. That a student dislikes a study is no good reason in itself why he should be excused from it. There is some truth in the ascetic doctrine that one's appetencies should be suppressed and his repugnancies disregarded. All that is said in this para-

graph proceeds on the hypothesis that symmetry and wholeness are postulates in the art of education.

Much of the skill that is ascribed to the hand is really located in the head. Thus, one may never have employed the left hand in writing, but in case the right hand is disabled, its fellow, without any training whatever, will come to the rescue and write, not only legibly, but in the usual style of letters. Evidently, the origin of this potential skill is in the mind.

While the immediate condition of discipline is exercise, its fundamental condition is nurture. Perhaps it is nearer the truth to say that discipline is the joint effect of nurture and exercise. Nurture produces or maintains growth, that is, addition to structure, but volume is not discipline, that is, power and skill; while exercise, without nurture, is wasting and weakening.

From the standpoint of mere discipline, the mind is an intellectual machine with all its parts in perfect working order and ready on the instant to obey the voice of motive and to execute the manifold behests of the will. It is a mighty engine, ready to move at the voice of command on any one of a thousand routes, or to turn out any one of a thousand products; but without this voice of command, without the mental and the moral fiber that gives coherence and strength

to its working parts, without the propelling force of will and emotion, and without instrumental knowledge, it is a beautiful but useless piece of spiritual mechanism. Discipline is an essential element in education, but it is only one of three coördinate elements.

What has now been said under the head of discipline may be summarized as follows:

Discipline is the reflex effect left on the mind by the studies and pursuits that call into play its energies, or tax its powers.

As every study requires either a maximum, a medium, or a minimum of mental effort, it will have one of these three degrees of disciplinary value.

For purposes of discipline, the mind must work at high tension, or under continuous strain, and the tax on its powers must be cumulative.

Discipline as a process creates power and converts this power into skill.

Some of the special intellectual qualities included under the term are *insight* or *penetration*, *comprehension*, *versatility*, *good judgment*, *discrimination*.

Discipline should aim at wholeness, soundness, symmetry; and to this end it must follow a system of curbing and stimulation.

Distaste for a study, when not the result of poor

instruction, results from a dormant or imperfectly developed state of the activities which this study requires, and indicates wise stimulation by the very study which the mind seems to reject.

In its origin manual skill is a mental endowment; it is the creative and directive mind that communicates delicacy and deftness of touch to the fingers.

Discipline creates an instrument that is useless without will, motive, moral power and instrumental knowledge.

II. *Wisdom is Profitable to Direct.*—From studies disciplinary we now pass to studies instrumental—that is, to studies that furnish the mind with its working tools. We must distinguish the hand, with its strong muscles trained to deftness, from the tools which it employs in the execution of its work; the bent bow with its cord stretched to high tension, from the tipped arrow waiting to be sent to the target. However well trained or disciplined the mind may be, it is a useless instrument unless furnished with its appropriate tools, these tools being the studies or knowledges which the mind may employ in the performance of its manifold functions. It should be almost as easy to distinguish the mind from these instrumental possessions as to distinguish the artisan from his assortment of tools. But

these tools, these saws, chisels, and planes, are but secondary; the box of primary tools is the artisan's head with its ideas or working plans, its knowledge of matter and its laws, and its knowledge of tools and their uses; for without this knowledge how could he know what to saw, when to saw, and how to saw? At this stage of our inquiry the important thing is to distinguish the items of instrumental knowledge as possessions of the mind quite distinct from the mind itself. This is what we mean by practical knowledge, knowledge that the mind can employ in the solution of problems, in the doing of work, in the calculation of results, in the execution of plans, or, more concretely, in building houses, in curing diseases, in pleading suits, in writing sermons, in educating children, in piloting vessels, in making treaties, in conducting a campaign, in cooking a dinner, in buying and selling, and so on without end. If one limitation to beneficent doing is lack of skill, another and greater limitation is lack of knowledge. It is not said that people perish for lack of skill, but for lack of knowledge. When language was young and speech picturesque, knowledge was light, light-giving, enlightening; it was a lamp to the feet and a light to the path. Just as in the dark we throw a light ahead of us to guide us on our way, so

in the conduct of life we throw the light of knowledge upon the problems we have to solve, and so trace our course with certainty and success. Light is an instrument, and the most beneficent of all instruments.

To show how old these truths are that we are discussing, and how clear was the distinction between the mind as an instrument, and the knowledge held for its guidance, observe this quotation from Ecclesiastes x., 10: "If the iron be blunt and he do not whet the edge, then must he put to more strength; but wisdom is profitable to direct." Here we see the blunt, untrained mind, doing its work only by dint of painful effort, contrasted with the sharp, incisive mind, doing its work easily and deftly; and in the final clause we have the conception of knowledge as light—"profitable to direct." It is with this last conception that we are now dealing. .

Easy illustrations of instrumental knowledge are found in every profession, art and trade where special knowledge is employed in the application of means to ends, or in the production of effects by the use of known causes; as, when an alkali is applied to flesh that is burning with an acid, or when sulphur is thrown into the grate to quench a fire in the chimney, or when a decision is quoted to throw a case out of court, or when

the forge fire is sprinkled with water to increase the heat, or when an impending examination is used to spur a class to diligence, or when a fact in history is used to impress a lesson in political economy. Politics as an art consists in the deft manipulation of motive. As man is a gregarious animal, his most pressing need as a social creature is communication with his fellows; and to this end he turns to hourly and momentary account his knowledge of symbols, and so resorts to speech, to writing, to the telegraph, to the telephone; at sea, to the language of flags and whistles, and on railroads to colored lights and signals. The hourly use of computation in the transaction of business is a familiar illustration of the instrumental value of knowledge. Man might be defined as the animal devoted to the conversion of knowledge into the uses and utilities of hourly life.

For the purposes contemplated in this discussion it is necessary to mark the distinction between knowledge that is directly instrumental and knowledge that is instrumental indirectly or at second hand. The instrumental value of telegraphy is incalculable, but one may enjoy all the practical benefits of this art without having any personal knowledge of it whatever; that is, telegraphy confers its benefits on the great mass of

mankind through a few specialists; its instrumental value is of the secondary or indirect order. The same is true of every variety of professional and technical knowledge. One does not need to be a hatter to enjoy the use of hats, or a physician to participate in the benefits of the healing art, or a chemist to profit by the utilities of this science. This truth may become clearer by contrast. Thus the instrumental value of reading, writing and simple computation is of the direct order; that is, we must all know and practice these arts in order to participate in their benefits; they do not commonly serve us by proxy. It follows from the distinction just made that there are certain kinds of knowledge that all men should have for self-guidance, while there are many other kinds of knowledge which serve them by proxy; they do not need to know them in order to enjoy all their practical benefits. Our courses of study contain many subjects that the average student will never turn to practical account; they are to be defended on other and higher grounds.

This narrowing down of knowledge whose instrumental value is of the direct or primary order has been brought about by the division and specialization of labor and it will happen as this process is extended that the volume of directly "practical" knowledge will

grow smaller and smaller; that is, men will more and more employ the knowledge of specialists, will more and more specialize their own activities, and will reduce to a narrower and narrower compass the knowledge which is required for self-direction and self-help; individual effort will become less extensive but more intensive, it will cover a smaller field but will go down deeper, men will do fewer things but will do them better, and the vast field of knowledge will be cultivated less and less for its practical utilities, but more and more for the edification and perfection of the human personality.

“Studies that serve for ornament,” to repeat Bacon’s phrase, have their place under the head of instrumental studies. On occasion it may be our direct purpose to please, to entertain, as in telling a story, reciting a poem, singing a song, playing a piece of music, or acting a drama, and the studies that serve this high purpose have an instrumental value in exactly the same sense in which trigonometry has an instrumental value to the surveyor. There is an art of pleasing, just as there is an art of making shoes, and those who practice this art must master certain studies and then turn them to practical account as the tools of their trade.

III. *Studies Serve for Delight.*—We have now come to the consideration of certain studies whose value lies, not in their use as instrumental knowledge, nor in the discipline which they impart, but in mere possession, and in the contribution which they make to the moral life of the soul. We must distinguish between the instruments of the kitchen and the adornments of the parlor, and ask ourselves such questions as these: In what does the education value of a vase, or of a painting, consist? What educative purpose does ornament serve? Is there a value in mere possession quite independent of any utility into which it may be converted? What is the major educative value of travel? What is the highest purpose served by a piece of literary art? For purposes of education, is it desirable to cultivate happiness, serenity of spirit, and composure of mind? These questions will exhibit the scope and direction of this branch of our inquiry.

When Bacon says that it is “in privateness and retiring” that studies serve most for delight, he evidently turns aside from the world of utilities, from all consideration of what we shall eat or of what we shall drink or of what we shall put on, and directs our thoughts to that higher region of the contemplative life where the soul is maturing its powers, acquiring

new graces, fortifying its purposes, purifying its motives, and in this state of isolation and retirement preparing itself for new conquests in the lower regions of active life where the law of service compels men to be instruments. In discussing the value of arithmetic, Plato expressly distinguishes the lower world of commercial life from that higher world of the contemplative life where the soul dwells in serenity and peace while maturing its heaven-aspiring powers.

This higher region of the spiritual life cannot be defined in such a way as to cut it off from the lower regions of the purely intellectual life, but some of its marks or characteristics may be noted, as follows:

It is the region of feeling, affection, emotion, as distinguished from the region of mere thinking. The intellectual discernment of an object, and the loving or hating of that object, are irreducible phenomena; neither can be expressed in terms of the other. All that we can say is that the intellectual discernment must come first, and that the clothing of the object with the halo of feeling is a subsequent phenomenon; that the two phenomena originate in different regions of the spiritual life, and that what is most truly human in man is his purified and exalted emotion. The problem of moral education would be solved if there

were an art of investing the objects of thought and perception with the best emotional attachments. This would not only make the will operative, but it would always work in right lines. It is not mere feeling that is wanted (animals and savages have enough of that), but feeling that has been chastened, purified, and disciplined by the regal understanding. A pure heart, the home of saintly emotions and holy aspirations, is a higher attainment than a wise head garnished with the most brilliant intellectual endowments.

The spiritual life is also the region of ideals. An ideal may be defined as a perfected idea with an attached feeling of admiration which often constitutes a motive or stimulus for realizing higher effects. Plato held that the work of creation was accomplished by means of ideas, patterns, or types, held in the divine mind and embodied in the objects of his creation. Thus, every tree is a copy, more or less imperfect, of a divine pattern laid up in heaven. The divine idea is thus the divine ideal; the pattern is perfect, is seen to be good, and is employed by the creative energy in constructing the visible world. In human experience, however, the case is different. The mental picture left in the mind when we have observed a tree is an idea of a tree, but it is imperfect because the

tree itself is imperfect; but out of all our ideas or mental pictures of trees we construct a new pattern or type, embodying the excellencies of all, and invested with added perfections by the creative power of the human soul, and this last pattern or type is an ideal. The works of creation are therefore the interpreters of the divine mind; so our ideals help us to come a little nearer into the divine presence, and to understand more fully the divine purpose and thought. Work of high quality, whether by the artist or the artisan, is dependent on the formation and possession of wholesome ideals. In one of its highest aspects the art of education is the art of creating ideals.

It is the region of reverence and of worship. Man's emotional and affectionate nature reaches its culmination in reverence and worship—that homage which the heart pays to what is supreme in goodness and power. Affection purifies and ennobles by bringing us into likeness with the object of our affection. We idealize what we love, and thus are insensibly transformed by our aspiration after the perfection that we ascribe to the object of our affections. The supreme transforming power is reverence, adoration, worship; and the measure of human greatness is the degree to which the nature has been transformed and renewed

by a pure spiritual worship. If the region of the intellect is holy, this region of the higher emotions is the holy of holies; and the education that has failed to affect the soul in these higher movements has fallen short of its truest mission.

It is the region of emotional and judicial calm. One of the last and highest attainments made by the human soul in its upward progress is a settled state of emotional repose, of judicial calm, of genial serenity, of inward peace. In order to put forth all its powers and to attain to its predetermined and possible perfection, the soul must finally establish this inner court or sanctuary where emotional storms never penetrate and where the fruits of righteousness may mature in peace, and into which the spirit, weary and worn, may retire for comfort and strength. That education is vain, and that religion is vain, which does not culminate in this repose of the passions and the emotions, and in a dominant state of serenity and peace. The route to this supreme attainment is not through insensibility and fatalism, but through wide intelligence and sharp conflict, through a lifting of the intellectual horizon and a chastening and purification of the emotions.

It is the region of faith and hope. It is through

faith and hope that we escape the hard limitations of matter and sense, gain some grasp on the unseen and the eternal, and thus manifest our essential divinity and immortality. It is through faith that man maintains fellowship with his kind, and it is through faith that he maintains fellowship with his creator. Faith is the sure and steadfast anchor to the soul. The life that has lost its buoyancy and spring has degenerated into the lower regions of the animal and the vegetative. It is hope that gives to life its buoyancy and spring, and therefore the man who has lost hope has ceased to be a man. For the maintenance of hope, life must have an outlook, a vista through which distant glories may be discerned. The opening of such vistas is a prime function of education and study.

It is the region of the contemplative life. When Plato declares that the educated man should be "the spectator of all time and all existence," he evidently refers to the inner contemplative life, as distinguished from the outer, active life, where the energies expended are physical rather than spiritual. Men with the weight of the world's betterment and redemption upon them have found it necessary to withdraw from society for a period, in order to give themselves up to contemplation, and to mature their purposes and to

renew their spiritual strength in solitude. What is so essential to great men is, in a measure, essential to all men. All men need intellectual and spiritual perspective, and to this end they must resort to the contemplative life, where the soul, in peace and repose, can enter into communion with itself. All men must *do* something, but the condition and support of the outer, instrumental life is the contemplative, reflective life, which fits men to be something.

It is the region of character. Two steel cables may be identical in weight and appearance, but under equal stress one may break while the other holds. We ascribe the difference to internal constitution or fiber, to some invisible but real quality inherent in the matter or metal of the cable. And so when men break under the stress of circumstances we ascribe the fault to some weakness or flaw in that moral fiber of the soul which we call character. We are again in a region where exact definition is impossible, but we may say that the fundamental element in character is will, or the focusing of energy on effort. This determining power of the soul is largely constitutional and is innate, but as the antecedent to will is motive, or emotion, we gain some control over the will by the creation or manipulation of motive, so that a strategic

point in moral education is the culture of the feelings. But the current of feeling may set in strongly towards a given course of action which the will may suddenly reverse or inhibit, stemming or overcoming the flood tide of emotion. This veto power comes down from the intellect as the prerogative of the dominant reason. Another strategic point is therefore a broad and prophetic intelligence that can discern the remote consequences of proposed lines of conduct. The operations of the intellect affect character in still another way. High states of feeling prevent clear and effective thinking, and, conversely, vigorous thinking allays or checks the vehemence of feeling. Now character, in order to be judicial, must be protected from emotional storms, and so it happens that a mind addicted to thinking produces that "quiescence of the emotions" which is favorable to the prevalence of right conduct. It is also to be noted that when the higher emotions are dominant, the lower or dangerous emotions are either suppressed or checked. A man who finds pleasure in literary, scientific or artistic pursuits is in little danger of the pleasures that pervert and degrade.

All educational effort should terminate in character, for character is the highest aim of the teacher's

art. Studies that are directly tributary to this end transcend in importance studies whose major value is of the disciplinary or of the instrumental type. Comenius rightly defined the school as an *officina humanitatis*, a manufactory of men, and were this conception generally prevalent, studies of the humane or culture type would regain the standing which they held in a less "practical" age.

With this outline well in view, we may now consider some of the questions raised in another place in this essay.

It must be apparent, even on a slight examination, that only a few of the studies embraced in the ordinary curriculum can be converted into instrumental uses by the general student. For example, what is a valid defense for the study of astronomy in school or college? It is evident that this science as a whole cannot be converted into a correlative art. For the most part, astronomical laws are entirely beyond human control; the knowledge of them cannot be made instrumental by man in the satisfaction of his needs or in the execution of his purposes. Neither can it be said that the study of astronomy, as it is pursued by the general student, has such a marked disciplinary value as to give it a permanent place in

our courses of study. The very best, and indeed the only, answer that can be returned to this question is the declaration of the Psalmist: "The heavens declare the glory of God and the firmament showeth his handiwork." The one culminating effect left on the soul by this study is admiration, awe, reverence, worship. It is a spiritual tonic, refreshing, inspiring, and lending a subtle potency to the very substratum of character.

You stand under the glorious dome of St. Paul's, you traverse the aisles and chapels of Westminster Abbey, you sit in rapture before Rubens' "Descent from the Cross," you linger and dream in the earthly paradise of the Lake District, or you listen to the peals of the great organ as they reverberate through "the long-drawn aisles and fretted vaults" of Durham Cathedral. What is the grand outcome of it all? Have you gained anything that you can sell for money or convert into food, dress or shelter? Or, if you could, would you sell it? Would you not rather keep it as a priceless possession than to convert it into any mere utility?

In matters educational we are so accustomed to raise the question of utility at every step, to inquire anxiously the money value of this or that study, and

to ask how each branch of knowledge will contribute to our "getting on in the world," that we have practically lost sight of the fact that there is often a supreme value in mere possession, without any thought of conversion into instrumental uses, that an acquirement often serves its highest purpose simply as a source of contemplative delight. What account are we to render of the paintings that hang on our walls, or of the ornaments that stand on our mantels? Are we to be picture venders or dealers in bric-a-brac, in order to realize the value of our art possessions? This would be to ruin their natural and proper value; such a perversion would be but little short of sacrilege. The noblest value of such art treasures lies in their possession and enjoyment; the fact that they "serve for delight" is their sufficient vindication.

Money lying untouched in a bank often has a higher value than money that is expended in food and raiment. In the way of an abiding and bracing sense of security, a deposit has a moral value that far transcends the value of money that is employed in mere utilities. The moral value of life insurance is incalculable. The person insured does not hope to realize any return or profit from his investment, but

his rich reward is found in the feeling that his providence will protect the objects of his affection. This feeling of security is a moral tonic that is a stimulus in health and a medicine in illness.

What is here set down as true of material possessions is equally true of those spiritual treasures which the soul acquires through studies—those possessions which are chiefly valuable because they yield us contemplative delight. We cannot barter them for bread or raiment, nor can we make them the instruments of personal guidance, but their higher service is the “sweetness and light” which they diffuse over the soul, and the tone and spring which they give to character. A poem is neither a commodity nor an instrument, but its subtle spirit enters into the very structure and fiber of the soul, endowing it with serenity and poise, while, as a work of literary art, it is a perennial source of contemplative enjoyment. It affects conduct through character, just as food affects conduct through structure. The value of religious literature does not lie in rules and maxims that are directly convertible into conduct, but in its power to transform and renew the human soul.

The office of the æsthetic in human education and in ordinary life has not been sufficiently considered.

I have two pencils costing, respectively, one cent and five cents. Their instrumental value is the same; they both serve me equally well in writing. Why should one cost four cents more than the other? Evidently because in form and finish there is an element of attractiveness or beauty in the one which has a money value. Even in such a little thing as a lead pencil we pay heavy tribute to the æsthetic. But this dual quality of utility and beauty is universal; it inheres in everything we buy or possess, in every instrument we use, in furniture, in dress, in every form which matter is made to assume for human use. And thus, in the cosmos as a whole, what exuberance, what prodigality, we might almost say, what waste of beauty! In field and forest, in mountain and plain, in the heavens above, in the earth beneath, which is the dominant note, utility or beauty? I think the astonishing but real fact is that the visible world is primarily and chiefly a cosmos, a thing beautiful, and that utility is a secondary and subordinate purpose in its creation. This human cradle is sometimes hard, but it is adorned with tree and flower and canopied with blue and gold. While man is embodying more and more of the beautiful in everything that is fashioned by his hand, nature still outdoes him by creating

things that are wholly beautiful, things in which there is no vestige of the useful. Beauty is their sole and sufficient excuse for being. As studies at best are but a transcript of nature, why should not education be a reflection of the cosmos? In other words, why should not the dominant note in education be the æsthetic, as distinguished from the utilitarian? Food and drink and clothing are all necessary, but they are subordinate to the kingdom of God, which is not meat and drink, but righteousness, and peace, and joy. This having been attained, all the other things will be added.

Studies whose major value lies in their humane and culture effect have some or all of the following characteristics:

They have a large human interest; they touch man in what is most intensely human, his hopes, his fears, his aspirations, his affections, his destiny; they pulsate with life and feeling, and endow the individual with the accumulated moral power of the race.

They refer to some imposing unit that impresses the mind by its vastness or magnitude, or to some living, organic whole that excites human interest through the phenomena of life.

They give breadth and perspective, create a sense

of mastery and power, and endow the mind with magnanimity and tolerance.

They give contemplative delight, disposing the soul to serenity and peace, and fortifying it against the vicissitudes and calamities of life.

As the question of method is necessarily involved in this subject, it is entitled to a brief consideration.

In his "Education," Mr. Spencer utters a dictum to the following effect: The genesis of knowledge in the individual must be the same as the genesis of knowledge in the race. In other words, the individual must gain his knowledge just as the race gained its knowledge. Then follows this deduction: as the race gained its knowledge inductively by experience, the individual must gain his knowledge by experience, experiment or observation. He makes his dictum still stronger by declaring that the individual can gain his knowledge in no other way.

Following this eminent authority, some modern teachers insist that whenever the subject permits it, it should be learned, not as literature, as Matthew Arnold advises, but by personal experience and experiment; that in science, especially, the student must actually discover or rediscover by his own personal effort what the race has learned during its cen-

turies of history. This theory virtually throws books out of court and reduces the rôle of the teacher to little more than suggestion or guidance; he must not communicate anything on his own account, he must not interfere with the natural and necessary law which Mr. Spencer has so clearly and so authoritatively announced. Without discussing this subject at length, I submit these observations which I think will commend themselves to the common sense of all.

In that large and very important domain of knowledge known as the historical, the inductive or experimental method absolutely fails. Historical events cannot be reproduced, and therefore cannot be brought within the range of the student's experience. The facts of history must be learned out of books, learned as literature. And, then, in literature and in art, how is it possible to put the student in the place of the original writer or artist, and evolve his knowledge by any kind of experience such as this theory requires?

In science proper, where this theory is practicable if anywhere, it is applicable only in a modified form and to a limited extent. In any one science—as chemistry—to throw the pupil on his own resources

and to require him to discover or even rediscover the atomic weights, would be a farce; but when a half dozen sciences are to be treated in Mr. Spencer's fashion within the student's ordinary term of study, the business becomes a piece of mere stupidity.

The whole question reduces itself to this: *Shall we ride or shall we walk?* If the route is short and pleasant, and we have an abundance of leisure, we will walk, but if the journey is a long one, and tedious in whole or in part, and we are pressed for time, we will ride. In fact, riding has become the normal mode of travel, and the little walking that is done is merely incidental. A trip to the Matterhorn by railway would please all save a few reckless enthusiasts. The whole world might then indulge in Alpine travel. Books are to scholars what railways are to travelers, and to condemn books, as some prolific bookmakers are accustomed to do—Plato, for example—is as senseless as to condemn bicycles, railway carriages and steam vessels. The millions who need to learn geography must learn it out of books rather than by personal travel, and the same thing is true of all the sciences.

If there is any department of knowledge where Mr. Spencer's theory can be applied, it is that of phi-

losophy, where all the material is within the reach of every man who has a head. But even here Mr. Spencer thinks it wise to lighten the student's burden by doing the most of his thinking for him, and so invites him to read the volume of his "Synthetic Philosophy." If this justly distinguished philosopher were loyal to his own announced creed, his vocation would be gone.

In the third place, Mr. Spencer's assumption that the race has gained its knowledge solely by personal experience in the way of discovery is conspicuously and profoundly untrue. The race as such has made no discoveries in science, has created no literature, has made no original advances in ethics or religion, has not in any real sense been even studious; but in every age it has crucified, stoned and persecuted its prophets and seers, and has stoutly resisted every attempt to lead it up to higher planes of intellectual and moral attainment. In every age the race has been saved by a mere remnant, and the utmost it has done for its own progress is to accept under protest, in a spirit of defiance and hatred, some of the lessons which its teachers have set for it. The picture of the race engrossed in study, and with knitted brow attempting to read the book of nature and to solve the

riddle of existence, is truly bucolic, but wholly imaginary—it lacks every trait of fact and reality. Whatever advance the race has made towards the higher intellectual and moral life, it has made reluctantly and haltingly, always under stress, and with many backslidings. Rather than sit on hard benches and learn the daily lessons of wisdom, it has learned to play truant and to vex and harass its teachers. In every age a half dozen men have done the thinking for the race, in science, in philosophy and in religion, and to-day the race is a century behind its thinkers and teachers. The race has made progress, not by making original discoveries through personal research, but by accepting the discoveries made by its exceptional geniuses and scholars, and it is in this way, in the main, that the individual is to gain his knowledge. The volume of capitalized knowledge is ever becoming greater and greater, and the mastery of this knowledge through the interpretation of books is to be the main occupation of the student. The real additions to existing knowledge will be made by a half dozen men in the course of a century, so that the main function of schools and teachers is diffusion rather than discovery.

The question will be asked whether there is not a

place for actual observation and experiment in the study of science. Most assuredly, but not under the delusion that the purpose is discovery or rediscovery. In physics, the actual manipulation of apparatus is invaluable, because it gives a comfortable sense of reality to the study, as well as an introduction to the modes and processes of scientific investigation. The pretense sometimes set up that students under ordinary conditions are to reach independent conclusions by a course of inductive study is a sort of pious fraud, useful mainly to bookmakers and to pedants. When this theory of critical and independent study is applied to literature and art, the results are most deplorable. In these departments the critical spirit is unseemly and mischievous, even in the higher courses of instruction; but when in grammar schools, or even in colleges, students who barely have the gift of appreciation presume to sit in judgment on the works of poets and painters, and to express *ex cathedra* opinions on their merits and demerits, the sight is sickening. What a school of modesty, respect and reverence!

Mr. Spencer pleads the "beautiful economy of nature" to support his declaration that the studies that are best for guidance are also the best for discipline.

This case illustrates the vice of the high *a priori* method in philosophy. The assumption of "nature" as a faultless guide is a pure fiction, and any argument based upon it is unworthy of serious attention. Whether a good disciplinary study is also a study that is equally good for guidance is a mere question of fact, and all the facts in the case point to an opposite conclusion. For example, algebra is a better disciplinary subject than arithmetic, but for the general student is nearly valueless for guidance; and in arithmetic itself the parts that are the most remote from the student's daily needs, such as the roots, progressions, etc., are the parts that yield the highest discipline. An interest table, a mere machine, is far more "practical" than the doctrine of percentage, but no one will say that the daily use of such a table has any appreciable disciplinary value. It would be far nearer the truth to say that the studies that yield themselves the most readily to guidance are the least valuable for disciplinary purposes.

The main positions taken in this chapter will now be recapitulated in the form of a general summary.

Studies are the agents which the teacher employs in the practice of his art, and if his practice is to be

rational he must needs know the education value of these several agents.

Skill in teaching consists in ministering wisely to the wants of the mind and soul, and so the first element in the teacher's professional knowledge is psychological.

The first need of the uneducated mind is discipline, or the endowing of its activities with power and skill; and corresponding to this need there are studies whose preëminent value lies in the fact that they are a mental gymnastic.

Another need of the mind is instrumental knowledge, or knowledge that can be converted into personal guidance, or into the utilities of life; and corresponding to this need there are studies whose major value consists in their ready convertibility into guidance and utility. This instrumental value of knowledge is either direct or indirect; that is, it accrues to the individual through his own abilities, or it reaches him indirectly through specialists.

An organic need of the soul is serenity, poise, contemplative enjoyment and a chastening and purifying of the emotional nature as the basis of character; and responding to this need there are studies of the culture type, whose supreme value lies in the fact that

they "serve for delight;" that they are breadth-giving, pleasure-giving; that they generate moral power and reënforce character; and that they endow the soul with judicial poise and calm.

Studies, therefore, serve three distinct purposes, or supply three distinct organic needs, and hence have three distinct values: disciplinary, instrumental, and culture. These values may be tabulated as follows:

EDUCATION VALUES	{	Disciplinary	{	Direct
		Instrumental		Indirect
		Culture		

Every study has a characteristic or major value, and one or both of two minor values. Every study has a disciplinary value, high or low, and it often happens that the studies most valuable for discipline have a low value for guidance.

Disciplinary studies require the mind to work at high tension, under stimulus and stress; but the mind may deal with culture studies while in a state of comparative repose, simply receptive rather than active.

The conception that learning is to be a process of rediscovery, in which the pupil is to repeat the experiences of the race, is "a bold fiction." The attitude of the learner must often be that of simple acceptance on faith, and much that has been originally acquired

by slow and painful inductive effort must now be learned as literature, by the reading and study of books. We may now ride where the pioneers in learning were obliged to walk; we may draw water without the labor and cost of digging a well; we miss the discipline of pioneer toil, but we have immeasurable gains in "sweetness and light."

EQUITY IN EXAMINATIONS

VIII

EQUITY IN EXAMINATIONS.

It is my belief that the almost universal antagonism between students and their instructors, and the existence of a code of school morality quite distinct from that code of morals that obtains outside the school, are due in large measure to an injustice, not to say immorality, originally introduced into examinations by instructors themselves. By means of his examination paper a teacher may make himself the arbiter of his pupil's fate; he can condemn him to any desired degree of humiliation, can block his progress in the school, and can send him home in disgrace. By constructing his paper on unjust principles, or by looseness or injustice in the management of results, a teacher may decimate his class and spread a consternation throughout the school that is demoralizing to the last degree. In the hands of an unwise or unjust teacher, the examination paper becomes a sort of Gatling gun mowing down its score of hapless victims. Woe to the school where this instrument of tremendous power is used unwisely or maliciously! It creates secret hostility between teacher and pupil;

arbitrary power, unjustly exercised, is offset by tricks and frauds on the part of the victims; and the school becomes the scene of sorry encounters between those who should be united by the ties of a common interest and a common respect. I have purposely thrown this dark side of examinations into sharp outline, for it is my purpose to find a cure, if possible, for the evils that have sprung from the misuse of an instrument that is in itself not only valuable, but invaluable.

Leaving out of present consideration the purposes served by an examination as a motive and a discipline, I will discuss its use as a test.

An examination properly conceived and conducted puts to the proof both the wisdom and the skill of the teacher and the degree to which the pupil has profited by his opportunities. During a term of weeks a teacher has been expending his wisdom and skill in the production of a desired result—some proficiency of his pupil in knowledge, some gain in mental discipline, some addition to culture and moral power. Simply as an artist, on his own personal account, he needs to know with some exactness the degree of his success. For this purpose he can do no less than resort to an examination of his work, to an inquest

for results. The mason must try his wall by the plumb line, the seaman his course by compass and chronometer, the political economist his theories by statistics, every successful workman his work by methods in keeping with the nature of his craft.

Teacher and pupil are coördinate factors in the work of education. The teacher has duties to himself and to his pupil; the pupil, duties to himself and to his teacher. The pupil must be responsive to his opportunities, and from time to time should give proof that he has been loyal to duty. In subjects where there is logical sequence he must make it clear that he has a knowledge of the lower topic sufficient to justify his admission to the higher. For these purposes some test must be applied, not the same in all cases, but varying with the nature of the theme and with the nature of the product to be tested. As it is at this point that examinations so often break down, attention must be called to some distinctions in subjects as seen from an examiner's point of view.

The subjects included in a course of study serve different purposes, produce different results, and have different values. In some cases the desired end is knowing, in others doing, and in still others being. In some cases the mind must work at high tension,

every power alert and in a state of intense activity; in others the mind is chiefly in a receptive attitude, in a state of repose, simply absorbing the impressions made upon it, without putting forth any conscious volitional effort; and in still others there is a middle state of activity, the grasping and holding of material by the power of the memory. In other words, there is a maximum, a minimum and a medium of mental exertion and effort. So far as subject matter is concerned knowledge is either employed to generate power, somewhat as dumb-bells are used to strengthen the muscles, or it quietly passes into structure by a process of absorption and assimilation, or it is simply held in the mind as useful furniture ready on occasion to be turned to practical account. The mind must often be made to work at high tension, under the lash and goad, and the justification of this procedure is discipline; study and recitation are a mental gymnastic, and the teacher a trainer or gymnasiarch. But at the other extreme, the mind must often be allowed to work at low tension, in a state almost passive, in an attitude of repose favorable to nourishment and growth. I am coming to think that this is the normal mental state, the only state favorable to that organic growth which constitutes character. In all of its

highest aspects education is growth, and all true growth, as we know, is insensible, unconscious; of the fact or result of growth we may become conscious, but not of the process. Give the mind food in proper quantity and of proper quality, and growth, in the main, will take care of itself; if any stimulus is needed let it be gentle.

We should divest ourselves of the conceit that the main purpose of the school is drill. If all the teachers in a school were drillmasters, the school would soon become converted into an asylum of lunatics, of imbeciles or of cranks. The situation is saved by the so-called "easy subjects," for which we sometimes feel the need of making an apology. If periods of comparative repose did not alternate with periods of high pressure and mitigate their severity, education in its real sense would become impossible, and the mind would lose its just balance. An ideal in education is yet to be realized: to make a fair adjustment between disciplinary studies and culture or growth studies, and by way of relief introduce into subjects which lend themselves most readily to drill, something that will regale, nourish and refresh. Let us temper gymnastic with music, using this term in Plato's sense. Let us gain firm hold of the notion that the mind

must be fed as well as trained; that nurture should not only accompany training, but that wholesome and liberal nurture is the essential condition of training. Let us also acknowledge another coördinate truth: that with the mind as with the body, when training passes a certain point it not only prevents growth, but leads to perversion and distortion of structure. The law, both of physical and of mental gymnastic, is this: make training subsidiary to development and growth; do not insist on it for its own sake; use it simply as a means to a higher end.

From an examiner's point of view, the subjects constituting a course of study may be distinguished as follows: 1. Knowledge or information subjects; 2. disciplinary subjects; 3. culture, growth, or humane subjects. Owing to the circumstance that a given subject, in addition to its major or characteristic value, has one or two minor values, these classifications overlap, but the main lines of demarkation may be determined without serious trouble. It is also to be observed that by a special method of instruction the natural use of a subject may be sacrificed to a perverted use, and its proper classification destroyed. Again, the elementary parts of a subject may fall

under the first description, while the advanced parts pertain to the second or to the third classification.

The following may be taken as examples of knowledge or information subjects: tables of weights and measures, names and dates in history, local and descriptive geography, mere facts of physical science, the precepts of hygiene, and, in general, the "literature of knowledge."

All subjects necessarily have some degree of disciplinary value, for they can be learned only by some degree of mental effort, 'high of low,* but certain subjects produce the disciplinary effect in a preëminent degree, while their practical and culture effects are either nil or very small. The disciplinary studies of the common school course are grammar, the advanced parts of arithmetic, algebra, geometry, and trigonometry.

The subjects whose preëminent value is their contribution to culture and growth, which give breadth, moral power and contemplative delight, are geography, history, literature, science, art, music.

This whole discussion assumes that the instrumen-

**Mutatione viget, viresque acquirit eundo*, Virgil. Milo, having been accustomed to carry the same calf every day, ended by carrying an ox. Quintilian.

the arts of speaking, reading, writing and spelling have been adequately learned; they condition study, recitation and examination. If this were a study of values, instead of examinations, these arts would be considered under the head of practical studies.

In conducting an examination in knowledge subjects, it must be assumed that nothing can be revealed but matters of fact. It is not a question of opinion, of taste nor even of judgment, but simply of fact; and the questions proposed by the examiner should require of the pupil nothing but statement of fact. When the examiner's questions have been correctly answered, what inferences are to be drawn? At least within the region of the inquest, there must have been diligence, attention, memory and recollection. This is all that can safely be inferred from correct answers. The important thing to note is that by means of such examinations nothing definite can be inferred as to the higher qualities of the mind and spirit, such as judgment, taste, reflection, versatility, insight, breadth, skill, etc. Doubtless all examinations must deal more or less in matters of fact, and for this reason it is important to understand how very limited is the range of inference which such matter allows.

When we advance to subjects of the second class

we enter a wider and more fruitful field of inquest. The searchlight of the examination penetrates farther and illuminates wider regions of the mind and spirit. The question is not merely, what is the fact? but, what use can you make of this fact? In this region the mind can be made to exercise its power of doing, as distinguished from its power of knowing. Having learned the rule of Square Root, the pupil may be required to extract the square root of an assigned number; or, having learned the principle of Cube Root, he may be required to demonstrate the principle of Fourth Root. And so in grammar, knowing may be easily converted into doing. Not only do the principles and rules of grammar lead directly to the constructive effort, but the art of parsing is the art of classification, an art that requires the nicest insight and the best powers of judgment. The mere art of reasoning is best learned from mathematical drill, but the application of this art to contingent or problematic matter is best learned from the classification of words. Parsing is strictly a logical process, but before this process can begin, the sentence as a whole must be interpreted, and as the interpretation varies, the marks of words also vary, so that this exercise calls into play the balancing of probabilities. The

real import of grammatical discipline will become more apparent as we reflect that its problems are the very type of the problems that are of hourly occurrence in human life. Another point in favor of grammatical discipline is the fact that it is concerned, not with abstract quantities, as in mathematics, but with what is intensely vital and human—thought expressed in significant words. I call attention to these facts to show what significant inferences may be drawn from an examination in the disciplinary subjects. The mind is not exhibited in its passive state, holding in its possession certain furniture, but as an active power devoted to its characteristic function, thinking. I would say, then, that a prime purpose of an examination in what may be termed art subjects should be to discover the pupil's ability to think. In this, as in the former case, it should be noted that the region of the emotions, feelings, taste, of all that is most truly human, is left for the most part untouched; there is little or no revelation of the real inner life.

Exception will no doubt be made to the composition of the third group of subjects. For example, the study of the sciences will be recommended by some on the ground of their practical value, and by others they will be placed in the second group, because, when

taught inductively, they form such an admirable discipline. In the first place, the day has forever passed when every man is to be his own doctor, lawyer, hatter and chemist. By reason of the minute division of labor most of the so-called useful subjects have become useful only in a secondary or indirect way. Men may participate in the practical benefits of chemistry without having any personal knowledge of this science, just as they wear hats and coats without being hatters and tailors. In the second place, considering the fact that a student must learn a half dozen sciences within three or four years, the attempt to teach these subjects in a manner that is in any adequate sense inductive, is a pretence and a sham. I hold that the sciences have a higher and a nobler purpose, that of explaining and interpreting to us the universe in which we live. The sciences have but little direct practical value to people in general; as they must necessarily be taught, they have a disciplinary value only in a secondary degree; but their major value is of the culture or human type. They contribute breadth, enjoyment, reverence, poise, serenity.

There will be no dispute as to the rank and office of literature in a scheme of education. "The true

reason why literature should have precedence over all other subjects of instruction is that it is a sort of free and living philosophy. It is a general outlook upon the world, first upon the world of sense and imagination, the first with which the child comes in contact, and then upon the intellectual, social and moral world; it is a series of dissertations on art, morals and science. Literature is something even more than this. It is, we might say, the very beating of the heart of humanity, a beating which must be communicated to all if we do not wish to have it cease.”* Ancient classics have been very properly called the humane studies, or the humanities, because of their effect on character and life, and modern classics have a right to the same distinction and designation. By a perversion of use, an English classic is sometimes made a vehicle for teaching etymology, linguistics and history, and by a sort of ultimate analysis is spoiled as a work of literary art, sacrificed to the demon of thoroughness and drill. There is a sort of proximate analysis that enhances the sense of organic unity in a work of art, and up to this point it is helpful and to be commended; but any analysis that breaks the spell of artistic unity is fatal to the

*Fouillé.

noble uses of any work of art, be it a statue, a painting, or a poem.

It is only by some perversion of use that geography, history and literature lend themselves to drill. They constitute a trio of humane or culture studies whose purposes may be thus defined:

The purpose of geographical study is to make the pupil acquainted with the dwelling place of the race; of historical study, to make him acquainted with the notable deeds of the race; and of literary study, to acquaint him with the best that the race has done in the way of creating ideals of human excellence in thought, conduct and aspiration.

I believe that any one who meditates long and seriously on the educational problem and on the nature of the various subjects constituting a course of study, will feel more and more disposed to enlarge the third group of subjects and to assign less and less value to the so-called practical studies in a scheme of general education. If the objective point in education is manhood, character and a high type of life, then the first place must be given to those studies which are breadth-giving, inspiring and humane.

From the outline thus far given I now deduce the following rule of practice for individual teachers:

Form a clear conception of the nature and purpose of your subject; teach it in a manner to accomplish this purpose in the most direct and efficient way; and then resort to an examination that will discover the extent to which this purpose has been accomplished.

I now turn to the question of the examination paper and the principles on which it should be constructed. The first principle seems to me to be this: in its scope, the examination paper should be restricted to the field of study actually traversed by the pupil under the guidance and direction of the teacher.

It is manifestly unfair and unjust to spring surprises on the pupil by demanding what he has not had an opportunity to learn. As a preparation for setting an examination paper, the teacher should ask himself these questions: "What ground have I traversed with this class? What knowledge have I given these pupils a perfectly fair opportunity to gain? What degree of constructive power over new combinations have they had an opportunity to acquire?" What I want to insist on is absolute fairness in these dealings with students. I have known at least one instance wherein one-half of an examination paper bore upon matter which the class had never had the opportunity to learn. The first effect of this paper was dismay, and

then a determination to offset wrong by wrong, so that pupils who never cheated before now resorted to cheating with a will.

Another principle, or rather the first principle stated in a different form, is this: An examination paper should represent the state of the pupil's mind rather than the state of the teacher's mind.

This is very far from being a needless caution. We are all in danger of putting too high value on our acquisitions, especially when they are in any sense unique or exceptional. With this feeling it is natural to give such acquirements an airing, and the examination paper furnishes an attractive opportunity. Instead of putting ourselves as much as possible in our pupil's place, we put him in ours, and then exact of him what our larger opportunities have given us. A young tutor whom I once knew signalized his passage from the bench to the chair by setting an examination paper which floored nearly the whole class. The professor in that department confessed that he could not have satisfied the demands of his tutor's paper.

Another principle to be observed is this: An examination paper should open up the highways and not the byways of knowledge—important dates and

places, major facts, cardinal principles, typical examples; not the trivial, but the respectable.

Examinations have suffered not a little in reputation from the circumstance that they have often been employed to puzzle and disconcert hapless students. There is no objection to a question which startles the pupil into thinking, but there is no excuse for dwelling by preference on matters purely trivial and unimportant. Some things are so trifling and valueless that it is almost a disgrace to know them. An examination paper should have an air of dignity and respectability and the moral quality of fairness.

The three groups of subjects previously designated indicate in an ascending series three degrees of difficulty in the construction of examination papers that propose to discover the effects produced on the pupil by his several studies. It is easy to test the mere holding and recollecting power of the mind, by requiring the pupil to reproduce or restore what has been given him to memorize. In other words, it is easy to take an inventory of this kind of mental furniture. It is not so easy, however, to frame a paper that will test the pupil's power to think and his ability to construct on lines somewhat different from those to which he has been accustomed by his class-room

experiences. Good instruction in the disciplinary subjects should create a certain facile independence, and should generate the power to overcome difficulties of larger and larger proportions. Such an examination will bear on principles rather than on rules, on types rather than on single instances. A pupil who can give a clear analysis of the divisions of one fraction by another may be presumed to understand all that has preceded this part of the subject. If he can demonstrate the principle that underlies Proportion, it is certain that his understanding, and not merely his memory, has received a training. When a pupil can turn an English sentence into idiomatic French, German, or Latin, there is proof positive that he has gained the power to think in a second language, and that he has mastered its etymology and syntax. There is no finer discipline than translation, for it involves three difficult intellectual feats: the separation of the thought from its original symbols; the grasping of it as a distinct mental possession; and the embodying of it in a new set of symbols. The very same thing takes place in English when the pupil expresses the author's thought in his own language, by an exchange of symbols. Such exercises are an effectual test, not only of knowledge, but of power.

But what test can we employ to discover the highest uses that can be made of knowledge, when it has lost its identity through a process of elaboration and assimilation, and has been transformed into character, habit, opinion, emotion, power? It is easy enough to discover whether the pupil really has the knowledge that is capable of being transformed into these spiritual products, but is it possible to frame an examination that will discover these products themselves? We must remember that knowledge often falls short of its highest uses; that there is much reading that does not affect the heart and the life; that there is much seeing and but little discernment; that of the throngs that each day crowd the galleries of the Louvre perhaps not one in a hundred suffers any permanent change of heart towards the fine arts; and that men may listen with respectful attention to the preaching of the Gospel without the least spiritual edification. To use Bacon's figure, we may be assured by an examination that the right kind of food has been swallowed, but we cannot infer from this circumstance that it has really been digested. Seeing this difficulty in the matter of literary study, Dr. Corson proposes a solution in this wise:

“How is the best response to the essential life of a

poem to be secured by the teacher from the student? I answer, by the fullest interpretive vocal rendering of it. * * * A literary examination may then be made to mean something. The student, instead of being catechised about the merely intellectual articulation of a poem, the occasion of its composition, the influences which the poet was under when he composed it, the vocabulary, and a thousand other things, will be required to render it in order that he may show, through his voice, to what extent he has experienced it within himself, responded to and assimilated what the intellect cannot define or formulate.”*

This is no doubt an approach to the solution of a grave difficulty, but as it is easy to simulate emotion, we cannot be sure that this vocal rendering of a poem may not be mere acting; and, on the other hand, a lack of vocal training may prevent the expression of thought and emotion that really affect the life. At best, however, this solution affects but one member of the wide group I am now considering, and speaking of this group as a whole, I see no sure way of overcoming this great difficulty, no way of determining conditions of spirit by means of an examination.

*“The Aims of Literary Study,” pp. 99, 103.

But examinations should not be abandoned on this account, any more than teaching itself should be abandoned. Teaching should be reinforced by examination, and the best we can do is to assume that when the instruction has been of the thorough and inspiring kind, and when the pupil has done his intellectual work with thoroughness, the transformation into character and power will follow as a consequence.

In the region where this inquiry lies the mere presence of knowledge is no proof that the character and the life have been affected, nor is its absence any proof that there has been no spiritual growth. With the mind as with the body, nutriment must lose its identity before it can be transformed into structure and power. A poem may have performed its highest office, its effect may have been deeply imbedded in the soul, and yet the poem as such may have absolutely disappeared from the memory. As we read a new book we mark the paragraphs that please us most, or that arrest our thought. After an interval of years we scan these marked paragraphs, but without any internal proof that we have ever read them; but a closer scrutiny shows us the genesis of certain opinions or emotions which these forgotten paragraphs had produced. In consideration of such facts, what

possible inquest after knowledge can reveal these mysteries of spiritual adornment and growth? We cannot safely infer culture from knowledge, nor can we infer its absence from the absence of knowledge. Into these deep waters we throw the lead in vain, so far as the discovery of bottom facts is concerned.

In this connection I commend the spirit of the following quotation:

“In accordance with the same principles, all knowledge, however imposing in appearance, is but superficial knowledge, if it be merely the mind’s furniture, not the mind’s nutriment. It must be transmuted into mind, as food is into blood, to become wisdom and power. There is many a human parrot and memory monger who has read and who recollects more history than Webster, but in Webster history has become judgment, foresight, executive force, mind. That seemingly instinctive sagacity, by which an able man does exactly the right thing at the right moment, is nothing but a collection of facts thus assimilated into thought. This power of instantaneous action without reflection is the only thing which saves men in great emergencies; but far from being independent of knowledge and experience, it is their noblest result.”*

* Whipple, “Literature and Life,” pp. 193-’4.

“At the University of Cambridge he (Wordsworth) appears to have read the classics with the divining eye and assimilating mind of a poet, and if he did not attain the first position as a classical scholar, he certainly drank in beyond all his fellows the spirit of the great writers of Greece and Rome.”*

“Whether men sow or reap the fields,
 Divine monition Nature yields,
 That not by bread alone we live,
 As what a hand of flesh can give—
 That every day should leave some part
 Free for a Sabbath of the heart.”†

Throughout this whole group of studies I would place supreme stress on the other condition mentioned by Dr. Corson, “sympathetic assimilation on the part of the teacher.” The vital act of teaching is best described as induction, the taking on of spiritual and scholarly qualities from near presence to a man richly endowed with spiritual and scholarly qualities.

But another aspect of the examination question now presents itself. What disposition is to be made of the papers which students have written under such stress, and on which their fate is supposed to hang? Students look upon an examination as a very serious

* *Ibid.*, p. 258.

† Wordsworth.

thing; they have a feeling that it marks a crisis in their history; and they put into it the best that is in them of heart, mind and soul. I think it is a pity that all examiners do not enter into full sympathy with their students in a matter which is so full of seriousness. The paper of each student should be read as patiently and as carefully as though he were the only member of the class; and in marking the value of an answer the examiner should be guided by the very spirit of judicial fairness. Another thing is so important that it should be regarded as a first principle in estimating the value of a paper: nothing which is outside the paper should influence the examiner in forming his estimate of it. I have lately seen the following rule given for criticising a book: "Do not go behind the book. Your business is with the book, the whole book, and nothing but the book." And so I would say: Do not go behind the paper. Your business is with the paper, the whole paper, and nothing but the paper. This means that you are not to mark a paper from any thought of what the pupil has done or has not done in the past, nor of what he should do or should not do in the future, but solely from the standpoint of intrinsic merit.

Adhering strictly to this principle, it ought not to

be very difficult to reach a correct judgment as to the deserts of the paper. If it gives evidence that the pupil has made a good use of his opportunities and has gained a reasonable mastery of his subject he should be marked "passed." If the paper makes it clear that the pupil's knowledge of the subject is merely defective in some special parts, he should be "conditioned," and the defective parts should be clearly indicated by the instructor. If the paper is radically poor, indicating an ignorance or a very poor knowledge of the subject, the pupil should be marked "not passed," and should be required to pursue the study a second time.

"A condition" should not be imposed on a student either as a punishment for some past irregularity or as a stimulus to future diligence. The paper must be marked simply on its merits, and a "condition" must not be used as a weapon of discipline. I wonder if all have reflected on the demoralizing effects of these "conditions." They not only hang over the student as an impending calamity, but they rob every instructor of a part of the student's time that is his just due. "Conditions" must be removed, and in order to remove them they must have time that would otherwise be given to other subjects. By an unwise resort

to "conditions" an instructor may "hold up" an entire school by making every other instructor pay tribute to his exactions. In respect of its effect on a school, a "condition" is much more mischievous than a "not passed." Anything in school administration is mischievous that allows one instructor to invade the rights of other instructors. I once knew a teacher who played havoc throughout his school by his merciless impositions and exactions on the time of students. He was the prince of task-masters, his subject yielded readily to drill, and his pupils were in such terror of his rebukes that they virtually gave him the monopoly of their time at the expense of other coördinate departments of the university.

It happened in an important western school, a few years ago, that some sixty per cent of the students in a certain class failed to pass their term's examination, and this fact was advertised as a proof of the remarkable thoroughness of the instruction. What a reflection on this man's skill as an instructor, or upon his wisdom as an examiner, that only four pupils in ten could pass his own test on his own work! Under ordinary circumstances it is proof of unskillful instruction or of unwise examination to impose a large number of "conditions" and "not passed." In very large

classes, it may be said, individual instruction becomes impossible, and many failures are the consequence; but evidently these pupils lack opportunity through no fault of their own; either their progress should be slower in order that it may be surer, or the severity of the examination should be duly moderated. A large per cent of failures in examination is proof positive of poor work at some point on the part of the instructor. An evident exception to this rule is the case where an instructor restricts pupils, say in Latin, who have been taught their grammar with different degrees of thoroughness.

I have spoken of the extreme sensitiveness of students to the good opinion of their instructors and classmates, and I would have this feeling most sacredly guarded. Any unnecessary publicity given to a student's misfortunes is almost a crime. If we could only put ourselves in the place of our students and guard their interests as discreetly as we would have our own guarded, we would be doing no more than simple charity requires of us.

APPENDIX

BACCALAUREATE ADDRESSES

THE UNIVERSAL VOCATION

I

THE UNIVERSAL VOCATION

In the way of concrete Christianity, and as defining in few words the whole duty of man to his fellows, nothing seems to me more admirable than these words of Paul: "And let us not be weary in well doing: for in due season we shall reap, if we faint not. *As we have therefore opportunity, let us do good to all men, especially unto them who are of the household of faith.*"

I think the world has grown tired of theology, that is, of the abstract science of righteousness; but it never tires of religion, that is, of "that which binds and holds us to the practice of righteousness."* Men will return with perennial joy to the Sermon on the Mount, while they will not listen with patience to dry statements of theologies and creeds. Is the church losing power over intelligent men? Yes, whenever the preacher makes the theory of religion the warp and woof of his sermon, but never when the Bible is used to enforce the practice of righteousness and to

* Matthew Arnold

inspire men with the nobility of right conduct. All the great preachers of to-day are great because they offer meat and drink to the hungry and thirsty souls of men. In too many instances, sincere men and women go to their preacher for bread, and they are given a stone; they are offered the dry husks of theology when the thing they want is practical help towards the conduct of life. How shall we live in order that we may die with composure? How shall we bear up under the crushing burdens of misfortune and sorrow? What shall be our attitude towards those who despitefully use us? How shall we add to human happiness and mitigate human sorrow? Such questions disturb every human soul, and men have an instinctive feeling that they are to be answered out of the Bible through its authorized interpreters.

Beneficence, or the doing of good, is the universal vocation to which all men are called. As the years multiply I have the ever growing conviction that the real interpretation of life is to be found only in a steadfast devotion to the doing of good; that in the intent of our Creator our one mission on this earth is to renew its face physically and morally; to reconvert it into a paradise for human habitation and delight; and to restore to man the lost image in which he was

created. All other vocations—all trades, employments, professions—should be held strictly subordinate to this supreme vocation of beneficence. Why am I a scholar, a preacher, a lawyer, a poet, a farmer, a teacher, a tailor, a cooper, or a merchant? There is but one reply to each and all of these queries. “Because I see in these several vocations a fair opportunity to do good, to serve my generation, and to benefit the world.” Contrariwise, why am I to shun certain other vocations to which I see many of my fellow beings devoting themselves? Because the direct and the indirect tendencies of such vocations are to produce or to perpetuate evil, to make men worse and to carry the world farther and farther from its ideal state. None of these questions can be answered from a consideration of wealth, reputation, or even personal happiness. We are to “seek peace and ensue it,” even though we are sure to incur stripes, reproaches, poverty and shame; and we are to avoid evil pursuits, even though they insure wealth, honor and reputation.

This principle places us on high vantage ground from which to survey human occupations and to select the one which shall be our life vocation. Two things are required in order to make a wise selection of a

vocation : (1) To set aside at once those whose nature and aims are evil; and (2) then out of those which are beneficent to select the one most in keeping with our tastes and abilities.

It is not a difficult thing to distinguish and set aside the vocations that are evil. On this point the consensus of human opinion is unanimous. This classification is as old as history itself, and has come down to us as an inheritance. For example, no one, not even a dramseller himself, will assert that dramselling is a beneficent business. That question is not worth debating. It has been settled for all time to come. Whether farming is a beneficent occupation is not a debatable question. That too has been settled. There are not two sides to the questions.

However, this circumstance is to be noted : a beneficent vocation may be maleficiently administered, as when a farmer vends unwholesome food, or a statesman oppresses his people, or a preacher teaches error, or a writer composes a bad book. The evil is not in the vocation, but in the administration of it. On the other hand, no gift in administration can purge a maleficient vocation of its evil. Theft cannot be converted into a virtue; a thief is a public enemy, and thieving is an evil; there is no good in it, and no good can

come out of it. And still another thing is to be noted: the more respectability we throw about an evil vocation the more dangerous it becomes; the more attractive we make it the larger becomes the number of its victims.

When we come to select one out of the many beneficent vocations we fall upon grave difficulties. Very often the selection is made on false principles, especially in the case of the professions. Long before the boy's capabilities and tastes have been brought to the light by training and maturity, the fond mother has predestined him for the pulpit or the bar; and so we witness the sad fact of misfits and maladjustments—the heaven-born preacher at the plow and the misplaced plowman in the pulpit. In respect of the professions, I suppose the good rule is this: Defer the selection of a profession until the period of general training is over in order that the choice may be based on known fitness and well developed tastes. Good preparation being assumed, one does best who works in the line of his predilections, while to work against the grain is to compromise one's success from the very start. A good high school education seems to me the minimum requisite for making a wise choice of a vocation. So far as possible, duty and inclination should

lie in the same direction. One's power for doing good is thus doubled. It is a sad check to one's usefulness to do work which is a constant cross to one's inclinations. It is only by this concert of will and pleasure that we can do with our might what our hands find to do. "If we read without inclination, half the mind is employed in fixing the attention, so there is but one-half to be employed on what we read."* I allow that sometimes, at the very beginning, we must constrain ourselves to reconcile duty with inclination, but habit soon comes to the rescue, and what we learn to do easily and successfully we come to do with pleasure. The important thing is to put heart and soul into whatever we do, whether it be making a horseshoe, plowing a furrow, preaching a sermon, teaching a lesson, or writing a book. We should impart a moral quality to everything that we fashion with hand or brain. Whatever we build we should build to last; and if it be our privilege to make or mould "a thing of beauty," it should be of such temper and virtue as to be "a joy forever." Every sham is immorality, and the persistent maker of shams should be regarded and treated as a criminal. It is morality that gives coherence to human society; and

*Samuel Johnson.

in the last analysis it is morality that keeps a vessel from foundering and a house from falling. James Carlyle was a stone mason who put his religion into every wall that he built, and the great endowment that he left to his illustrious son was an instinctive and uncompromising hatred of shams in all their myriad forms. Burns, another Scotchman, was the very scourge of pretense, fraud and sham, particularly in their most odious form, hypocrisy, and so he wrote :

“God knows I’m no the thing I should be,
Nor am I even the thing I could be,
But twenty times I rather would be
 An atheist clean,
Than under gospel colors hid be,
 Just for a screen.”

When we seriously reflect on the prevalence of insincerity and fraud, and think how thoroughly society is honeycombed with deception and cheat, we for a moment grow pessimistic and sick at heart ; but when we take a broader view and study the course of human events as they reflect the morality of the times, we discover that through all this misery and corruption there is a power working for righteousness, that the tone of public morals is steadily rising, that there is a higher and higher standard of conduct, and that frauds and shams

are growing more and more odious as the race advances in experience. I pity the man who is not an optimist, who believes that the world is predestined to a growing corruption, that society is controlled by knaves and scoundrels, and that some day the powers of darkness are to hold high carnival over the final discomfiture of the true and the good. How can a soldier fight when he knows that defeat is already inevitable? How can a man raise his finger to do good when he knows that all the good that all men can do will be swallowed up of evil? I pray that you may be delivered from this dreary and joyless creed of despair. Bad as it is, look hopefully on the world and let its evident wickedness be but a stimulus to your devotion to well doing. Have faith in the ultimate triumph of righteousness, and consecrate all your powers to the betterment of human society. A cheerful optimism will multiply all your powers for doing good by ten. Listen to no man who presumes to preach the gospel of despair. Every benevolent and beneficent man may feel assured that he is an alliance with the everlasting powers of righteousness, that in his work, however humble, he is supported by the invincible agents of Truth.

Now, in further illustration of my theme, I will

mention some modes in which one may exercise the vocation of beneficence :

There is untold and resistless power in a good life, in a life exemplifying day by day one's fidelity to duty, one's loyalty to truth, one's devotion to righteous conduct and to the unostentatious doing of good. To be a loyal citizen, a helpful neighbor, a true friend, an affectionate son or daughter—to be thus dutiful in a quiet and beautiful way, is to lead a life pleasing to God and helpful to men. Such a life is an epistle known and read of all men, and all the more persuasive because it issues no commands and excites no comparisons and oppositions. Men generally rebel against formal attempts to make them better. A professional reformer virtually assumes that he is superior to other men, and this assumption is usually irritating and offensive; but a man who in a simple and unassuming way leads an industrious, frugal and temperate life, who fears God and keeps His commandments, is an irresistible power for good and an incomparable preacher of righteousness. There is a perennial charm in a life of such simplicity and uprightness, and I am convinced that the real salt and savor of society is to be found in lives of this unassuming type, in lives such as the poet pictures :

“Far from the madding crowd’s ignoble strife,
Their sober wishes never learned to stray;
Along the cool sequestered vale of life
They kept the noiseless tenor of their way.”

The center and source of a people’s moral strength is the home. It is in the serene quiet of the home life that are organized the forces that lift society upwards in the way of righteousness and peace. If the home is the scene of peace and joy and holy living, the young have the best possible endowment for serving their generation effectively. It is in private, not public, life that the saving virtues are nurtured. It is under the shelter of the roof-tree and around the family fireside that are formed the patriot and the Christian soldier. It is sometimes necessary to fight, as Aristotle declares, but all to the end that we may have peace. The ideal state to which Christianity is striving is that of peace and good will to men. “The fruits of righteousness are sown in peace of them that make peace.”

What I have just said amounts in substance to this: the prime condition of doing good in the world is to have a nature surcharged with good impulses, noble aspirations and benevolent purposes. If you are to do good you must be good; if you are to promote

peace and good will among men you must yourself have a peaceable spirit and a will to do good to others. Mean men may do a good deed from some constraint, as an unjust judge may finally listen to a widow's plea out of sheer importunity; but such service is a hollow mockery, offensive to God and man. It is out of the abundance of the heart that the mouth should speak. Good men will seek occasion to do good; they will not wait for some form of compulsion. A benevolent nature will express itself in good deeds, just as a merry heart makes a glad countenance. "What a delicious fortune is it to him whose strongest appetite is doing good, to have every day the opportunity and the power of satisfying it."* Education, as I am coming more and more to understand it, consists mainly in assisting young people to be or become something as the condition of doing something. The education that does not strike deep enough to affect the personality beneficently and permanently is of little worth.

Another mode in which you may do good to men as you have opportunity is to extend their intellectual horizon and give them clearer conceptions of truth. Narrowness makes us selfish, intolerant and unchar-

* Fielding.

itable. We should all pray for breadth, for some one to take us to the mountains whence we may see the world's greatness and our own littleness, to the end that we may be modest and at the same time cosmopolitan. All men should be travelers, travelers in fact, or, through books, travelers by proxy; so that while denizens of the little spot we call our home, we may become citizens of the world. How many mean prejudices slink away from us as we come into wider fellowship with our own kind! As we mingle with people of other nationalities we discover that between them and us there are many more resemblances than differences. Doubtless it was Paul's experience as a traveler that had taught him that "God hath made of one blood all nations of men for to dwell on all the face of the earth." Not until he had parted with his Jewish exclusiveness could he have become the apostle to the Gentiles. His sojourn in Arabia and his experience at Antioch were for Paul a liberal education, and with this endowment he became the world's preacher.

Socrates held that knowledge and virtue are synonymous, or, rather, that clear intellectual vision is an unailing guide to good conduct. On this hypothesis he devoted himself to dialectic, that is, to an unloos-

ening or analysis of the current ethical maxims and theories of his day in order to divest them of their sophistries and thence to discover the one kernel of grain hidden in the bushel of chaff. This theory is imperfect because it does not take into account habit and emotion; but there is so large an element of helpfulness in it that the clear discernment of truth must be counted as a fundamental condition of good conduct. Knowing that arsenic is a poison, we do not tamper with it; knowing that electricity kills, we do not lay hold of live wires; but knowing that intemperance leads to poverty and shame, all men are not temperate; knowing that untruthfulness saps honor and integrity, all men are not truthful. In the first cases there is no element of uncertainty and no seduction of habit, and so obedience is easy; but in the second cases there are exceptions to a general rule, and some men are willing to take their chances on these exceptions. Still, if men have been the subjects of moral discipline, they will shun the paths of danger when they have been clearly discerned by the intellect. Socrates no doubt assumed the fact of moral discipline, and with this postulate we may certainly build on the divine principle enunciated by John, that "the truth shall make us free." It is the business of the schools

not only to bring pupils face to face with truth, but to make the pursuit of truth one of the sweetest joys of life. By direct teaching, and perhaps even more by the silent and potent influences of example, you may fulfill one of your highest duties to man by clear expositions of truth, and by making the pursuit of truth a lovable vocation. "It is a pleasure to stand upon the shore and to see ships tossed by the sea; a pleasure to stand in the window of a castle, and to see a battle, and the adventures thereof below; but no pleasure is comparable to the standing on the vantage ground of truth (a hill not to be commanded, and where the air is always clear and serene) and to see the errors, and wanderings, and mists, and tempests, in the vale below: so always, that this prospect be with pity, and not with swelling or pride. Certainly it is heaven upon earth to have a man's mind move in charity, rest in providence, and turn upon the poles of truth."*

I think it is not possible to overestimate the influence of good books and the reading habit on the happiness and well-being of mankind. In this age of universal reading, men make books their companions, guides and teachers. The time once was when opinion, public and individual, was moulded and controlled

* Bacon, Of Truth.

by the orator and the preacher; but in these later days the pulpit and the rostrum have been largely superseded by the book, and the occupation of our leisure is reading, rather than listening. The old and true saying that "a man is known by the company he keeps," should now read, "a man is known by the books he reads." It is as certain as anything can be in the moral world that a young man who is an ardent lover of good books is in very little danger of moral corruption. This is so for two reasons: a good book is not only wholesome and stimulating moral aliment, but the reading habit is a precious preoccupation, and in moral training wise preoccupation is more than half the battle. These simple propositions are unmistakably true: The pursuit of happiness is a need of our nature; men will seek happiness in some form; if they cannot find it in the exercise of the higher emotions, they will seek it in the exercise of the lower; and if the mind is preoccupied with the higher pleasures it will be closed to the lower. "Students do not do enough for themselves, in these days of vast educational machinery. They for the most part confine themselves to the prescribed work of the schools. They are, in fact, obliged to do this, in order to keep up with the heterogeneous class work

imposed on them, and to prepare for examinations. They have so much to gobble up that, to turn aside to read, in a genial, sympathetic way, a great inspiring author, as they should be encouraged and allowed an opportunity to do, is quite impossible. The school bill of fare, with moral dyspepsia in its wake, *must* be gone through with, *ruat coelum.*”*

Next in potency to the Scriptures as an agent for awakening and nourishing the higher life of the soul, is genuine poetry; and to be wisely addicted to good poetry is to live in a tonic moral atmosphere and to put on the form of a higher spiritual personality. The true poet is a creator, the creator of a purer world, peopled by purified spirits, and purifying all who take up their abode in it. “The immoral and universal paths of our race are to be read and reread till their music and their spirit are a part of our nature; they are to be thought over and digested till we live in the world they created for us; they are to be read devoutly, as devout men read their Bible and fortify their hearts with psalms. For as the old Hebrew singer heard the heavens declare the glory of their Maker, and the firmament showing his handiwork, so in the long roll of poetry we see transfigured

* Hiram Corson.

the strength and beauty of humanity, the joys and sorrows, the dignity and struggle, the long life-history of our common kind."*

Next to good poetry as a transforming power is good fiction. While poetry constructs for man an ideal world and peoples it with ideal characters, fiction has for its field the analysis and reconstruction of the real world inhabited by real men and women, and leaves the reader to construct an ideal world for himself, to become his own poet and prophet.

Whether you can make this beneficent use of books or not will depend upon your own intellectual tastes and habits. It is not enough that you love to read; you should also love books as personal treasures, should love them as you love your friends, and with the same ardor as some men love pictures. But to love books you must own them. If you can associate some personal sacrifice with each one of them, so much the better. To be loved in the best fashion, a book should not only have intrinsic merit, which is, of course, the principal thing, but it should have some special charms of typography, paper, and binding. There are books beautiful and books ugly, books that appeal to the æsthetic sense as works of art, and books

* Frederick Harrison.

that are offensive to sight and touch. I would have you affected with a mild bibliomania, to the end that you may accumulate a certain number of book treasures which you treat lovingly and guard jealously. Books are the tools of your art, and to know how to use them wisely and effectively is one of the prime elements of your professional outfit. By degrees you should accumulate a library, not alone of professional books, but mainly of books that bespeak the tastes of a general scholar, books of history, philosophy and belles-lettres; for in a high and true sense these too are professional books, since the teacher is or should be first of all a scholar, a man enamored of the scholarly vocation. In fact any pursuit is professional that gives extension to a teacher's intellectual vision, gives him higher and truer views of life, or gives tone and poise to the sum total of his character. A good poem may do him a higher professional service than a book on method.

Without saying with Pope that happiness is "our being's end and aim," it is certain that happiness is a substantial good, a moral tonic needed by all men as a condition for doing a high quality of work. Noble work has been done under the stress of poverty and sorrow, but no one will say that these are conditions

that are to be desired. At best they are a painful stimulus to action, but in the end pain is weakening and demoralizing. Happiness, on the other hand, acting as a gentle stimulus, produces a constitutional condition that is most favorable to human exertion. We should pray for happiness, not for the sake of personal enjoyment, but because it is the state most favorable for doing work of the highest quality; just as we pray to be delivered from unhappiness, because this is a state unfavorable to the doing of good service. Doubtless sorrow is a discipline necessary to lead us on toward the perfecting of our nature, but sorrows come unbidden, and we have no warrant for bringing them forward by express intent. Happiness, however, or that state of mind which results from the free and unimpeded exercise of our activities, is even more essential to the normal life of the soul. As it is a state dependent more or less on conditions within our control, we may make it an object of deliberate pursuit, as a good which we may do to all men.

The case is still stronger when we take children into account. Men may react against unhappiness and even draw strength from it, but happiness is the vital breath of children, the very best, if not the only, moral stimulus on which they can thrive. In all its

appointments, a schoolroom for children should inspire a wholesome sense of rest and comfort, and should predispose its pupils to happiness. The teacher herself should radiate an atmosphere that is kindly, joyous and sympathetic—voice, manner and dress all conspiring to create a very paradise for childhood. One incomparable blessing bestowed on education by the kindergarten is the spirit of spontaneity and joyousness which it has introduced into the primary school. This I believe to be one of its supreme merits.

Wherever you work, whether in the narrow circle of your school, or in the wider field of the world, I would have you, by your good humor, serenity of spirit and kindness of heart, make it one of your distinct aims to diffuse about you the wholesome and inspiring tonic of human happiness. As far as you may be able, take sunshine into darkened homes, lift the clouds from heavy hearts and give support to drooping spirits. Be sympathetic, speak hopefully, treat gently, reserving frowns, censure and hardness for the rarest occasions. As the condition for doing this, fill yourself with hopefulness, cheerfulness, good will and benevolence, and count these as cardinal virtues in a life that is to be devoted to the dissemination of righteousness.

I venture to call attention to another principle which I think of vital importance. Whoever feels obliged to look for his happiness outside of himself, outside of his own resources, is in a state of great moral danger. If education is to be truly a beneficence, it should make a man self-contained, self-centered, resourceful, a law unto himself, so that when in peril he may rescue himself, and when alone he may not be lonely. One should learn to be on good terms with one's self, to be one's own companion, and out of one's own resources to draw comfort, happiness and strength. What a pitiable condition to be dependent on others for our daily supplies of happiness and moral strength!

For the end I have in view the one great essential is a well furnished mind, a memory that holds in safe keeping and subject to prompt recall some of the masterpieces of literature, religious, ethical and poetical. As specimens from sacred literature I mention the following: The Beatitudes; the Twenty-third, the Ninetieth and the One Hundred and third Psalms; the Twelfth of Romans, the Thirteenth of First Corinthians, the Third of James. Then there should come such complete poems as Gray's *Elegy*, *Thanatopsis*, *Il Penseroso*, and so on almost without limit. One of the shames of modern education is the syste-

matic and almost universal discrediting of the memory. It is denied that the memory is a storehouse, but every sane man knows that it is. "We must most of all exercise and keep in constant employment the memory of children; for that is, as it were, the storehouse of all learning."* It is asserted that "nothing should be committed to memory which has not been understood"; which is as wise as to say that "no food should be committed to the stomach which has not been digested." Not only is education without memory impossible, but the quality of education is dependent on the larger or smaller use that is made of the memory. At any rate, from our present point of view a man, to be well furnished for the highest requirements of life, has need of a mind that holds in store large and select portions of the world's wisdom. I do not know how I could do you a higher service than by inducing you to make of your minds a royal storehouse of the best things uttered or written by the world's great teachers, its saints, prophets, poets and philosophers.

In the next place I would have you do good to men by teaching them by precept and example the essential nobility and beauty of simplicity in character, in

* Plutarch.



habits, in pleasures, in desires, in wants, in dress—in all things that pertain to the conduct of life. In religion, in government, in society, in education—in every sphere of human activity there is an almost irresistible movement towards the artificial, the complex, the unnecessary. Rousseau was not far wrong in saying that men no longer know how to be simple in anything, and in believing that the cure for human ills is to be found in a return to simplicity, or to Nature, as distinguished from art. To know what Rousseau means by Nature, and so to comprehend his theory of life, one needs to go from Paris to Montmorency, from shops, palaces and prisons to trees, lawns and brooks; from din and bustle to solitude and silence. There is a strong confirmation of this theory in the history of religion, where reforms have always been in the line of simplicity, away from forms and ceremonies, back to a simple spiritual worship. In process of time the reformed religions must themselves reform, so irresistible is the tendency to find comfort in mere mechanism, and to work out one's salvation, not with fear and trembling, but by proxy, in a gentlemanly way, without much disturbance to one's feelings or sense of comfort.

Many of our wants are purely artificial, the mere

creations of fashions or fancy, responding to no real demands of our nature, but wasting our money, dissipating our time, and destroying our health as well as our happiness. Simplicity in food, in dress and in pleasure would add to our health, our wealth and our happiness; and if the young could be impressed with the beauty and the utility of simplicity in all the things that pertain to the conduct of life, they would be placed on higher vantage ground and insured against many of the so-called ills of existence.

I think most people in a normal state of mind and heart have periodical longings to retreat to the woods and the mountains, and there to renew their spiritual and physical strength in solitude and simplicity of life. No life can be great that is not nurtured and matured in solitude, and any life will be dwarfed and puny that does not sometimes retire from the heat and glare of society, to gain refreshment from the repose and silence of nature. Happy they to whom such retreats are open! The solitude of Craigenputtock was in perfect keeping with the genius and the spiritual needs of Carlyle during the years that witnessed the maturing of his powers and the crystalizing of his theories of life. At this supreme juncture, life in London, or even in Edinburgh, would have been folly,

if not ruin. Mr. Carlyle's latest biographer, Macpherson, speaks of "Carlyle's retirement to the howling wilds of Craigenputtock"; and Mr. Froude characterizes the place as "the dreariest spot in all the British dominions." As Craigenputtock appeared to me, it is a pleasant, even a charming spot for a man of contemplative habits and simple tastes, the only spot in Britain that I coveted as a dwelling place.

One phase of education as a process is growth, spiritual and mental. For such growth reflection or rumination is necessary, and for this purpose retirement or seclusion is an absolute necessity. Student life can not be wholesome if it does not have stated periods consecrated to reflection and contemplation. Possibly the lack of this opportunity explains why it is that college life contributes so little to a student's real education. For the most part, the mind is made to work at high tension, such is the pressure of class work and examinations, but it is only when the mind is working under a mild and gentle stimulus, in a state of comparative repose, that education proper can take place; so that it is the wisest student economy to arrange for stated periods of retirement where the sole occupation is rumination. I do not think it a paradox to say that

normal sleep is more favorable to true educational growth than the customary drill of the class room.

I now turn to another mode of doing good which is more strictly professional: the dissemination throughout your little circle of influence of correct notions as to the nature and purposes of education. How you could do more good in your day and generation than by preaching this evangel I do not know, for education is the architectonic or master art, the art that makes all others possible, that determines the value of individuals to the state, and that also determines the rank of states in the august procession of nations. I do not know which is the more potent factor for good in a community, a wise teacher dispensing to his little flock mental and spiritual food in due quantity and of due quality, or a wise patron predisposing the community to support a school of high quality. It is certain that both agencies are needed, and it should be true that every good teacher is also a good preacher of a sound educational gospel. In the order of logic the schoolhouse should antedate the church, which is the actual historical order. The evangelization of the world would proceed more surely and more rapidly if a sound educational gospel were to prepare the way for the Gospel of peace and good will to men.

It will help us to understand the essential secret of education if we reflect on the fact that many students who have been graduated from college are essentially uneducated, while there are many men who are educated in the noble sense of that term who never frequented an academy or a college. Many a boy has abandoned all hope of an education because he is shut out from the privileges of the schools, believing that education is dependent on the means which they offer. All young people should know that in this country of churches, newspapers and books, every one may become educated in some true sense of this term, and that one condition and prerequisite is an unfaltering will, a will that says *inveniam viam aut faciam*. Five minutes' conversation with a boy, under fair conditions, and pitched to the right key, might produce intellectual conversion and wholly change the current of his life. In every school there are natures quickly responsive to appeals addressed to what is best in them; and the beautiful way when once pointed out will be lovingly followed to the more beautiful end.

You should disabuse the minds of others, as I hope you have long since disabused your own minds, of the notion that education is synonymous with the posses-

sion of much knowledge. Knowledge to be really educative must, through a process of assimilation, be built up into that spiritual fabric which constitutes the human personality. Now, mere knowledge may remain in the mind as unassimilated material, almost as foreign matter in the spiritual substance, and it is as illogical to infer education from the mere possession of knowledge, as to infer warmth from unused fuel, or bodily comfort and strength from food still in store.

We come a little nearer the secret of education when we call it discipline or power. In a sense, but in an incomplete sense, a man is educated whose mind has been disciplined; but mere discipline, without that substantive being which we call character, that chemical compound of intellect, heart and will, all fused into one, and constituting the unit of the human personality—such discipline is impotent for good, a sword without a patriot's hand to wield it. Horses, pigs and even fleas can be trained but not educated. That is, they can be so disciplined as to execute tricks and feats not in keeping with their original nature, but there is no upward modification of character through anything that affects intellect and emotion; and it is because they have neither intellect nor emotion that they cannot be educated.

Though wise men from Plato to Colonel Parker, inclusive, have attempted to define education, no satisfactory definition of it has been framed; and we may be sure that when the definition is concise, it is practically worthless. To say that education is development, or life, or perfection, if not nonsense, is an affirmation so utterly vague and rhetorical as to be practically meaningless. Even the very best definitions, like those of Plato, Spencer and Huxley, are hardly more significant than a wave of the hand showing us in what direction to look for light. The best that can be done is to abandon definition and resort to description, such description bearing on one or all of the following points: (1) the end or purpose of education; (2) its matter or content; (3) its form; and (4) its processes. Proceeding on this line I offer the following statements, no one of which, nor all combined, amounts to a full description, much less to a definition:

Education is the process of bringing a human being into likeness with the highest type of his kind.

Supposing that the Apollo Belvidere typifies the physical perfection attainable by man, or the perfection towards which he is to strive; that the type of pure intellect is to be found in Aristotle, and the type

of moral perfection in Jesus; then this statement becomes useful in making known the purpose or end of education, but it throws no light on other essential elements of the problem, save by implication, on the principle that to know the end is almost to know the way, and that to have a strong desire to reach this end is to find a way.

The purpose of education is to endow the individual, through proper instruction, with the highest achievements of the race in thinking, feeling and doing.

Here we have the end somewhat vaguely stated as a certain endowment; the process as instruction; and the content, by fair implication, as knowledge.

Education consists in the equable development and training of the human powers through proper instruction.

This statement points out that the end and content is development and training; the process is instruction; and the form is symmetry, harmony, proportion. This is the ancient Greek and the modern German conception.

The purpose of education is to generate within the individual right feelings towards the true, the beautiful, and the good.

This is a statement that the purpose is certain feelings or emotions; the process is generation, development; the form is rightness, harmony; and, by implication, the content is certain knowledge.

“To prepare us for complete living,” says Herbert Spencer, “is the function which education has to discharge.” All that is accomplished by this much vaunted definition is to declare its end or aims, “complete living”; but this concept is so vague, so general, so indefinable, that its use for guidance is very small. Before this definition can be made available, we must know what is included in “complete living,” and it is not at all probable that any two wise men out of a hundred would agree as to the content of this concept.

Plato declares that “the end of education is to give to the body and to the soul all the beauty and all the perfection of which they are susceptible.” Beauty and perfection of body and soul is here the avowed end of education. These are wide concepts, we must allow, and in consequence, a congenial halo of vagueness hangs over this classical definition; but by reason of its analytical character it affords attachments to the teacher’s efforts which are wanting in Mr. Spencer’s statement.

In these illustrations the thought I wish to impress is that in your attempts to make known the secret of education you must proceed by description rather than by strict definition, and that you must resort to as many statements as there are phases to this many sided question, the most comprehensive that can occupy the mind of man.

In all that has preceded I have assumed that as the fundamental condition for doing good you must be possessed in full measure of the spirit of Christianity as set forth in the Gospel. The complement and crown of your education must be that spiritual transformation and culture which it is the mission of Christianity to bestow on mankind. In the fullest and best sense, you must be inspired and possessed by the missionary spirit, that spirit which includes in one noble group of philanthropists the preacher and the teacher.

A THEORY OF LIFE



II

A THEORY OF LIFE

THE prophetic eye of John, looking down the long vista of the coming centuries, foresaw that the kingdoms of this world were to become the kingdoms of the Lord and of his Christ. In other words, the moral world was to be reconstructed or re-created through the gospel of peace and good will to men, just as the physical world is now in process of reconstruction or re-creation through the transformations and ameliorations of science and art. In both cases the agents of this transformation are human hearts, human wills and human hands. Whoever diverts natural forces into the service of man; whoever drains a marsh or clears a jungle, builds a bridge, tunnels a mountain or invents a labor-saving machine; whoever cheapens a product necessary for the sustenance of man, stays the progress of infection, pestilence or famine, or lightens the burdens of the weary and the heavy laden, is an agent, under Providence, for the physical regeneration of the world, and is acting an acceptable part in the grand drama of life. And so in the moral world, whoever increases the sum of human happiness or diminishes the sum of human misery; whoever extends

the horizon of the human intelligence, lends inspiration to noble living and makes it easier to walk in the paths of righteousness; whoever dries up a source of vice, substitutes an innocent pleasure for a corrupting passion, makes virtue lovable and sin loathsome, is fulfilling his destiny as a man and is one of God's instruments for converting the kingdoms of this world into the kingdoms of the Lord and of his Christ.

The work of reformation is therefore the highest type of human activity; and taking the term in its comprehensive and legitimate sense, it should be the aspiration of every human being to become a reformer. No human being has the right to live without making the world better, and as much better as he has been blessed with talent and opportunity. No one has a right to lead a life of passive enjoyment, always receiving but never giving; and much less has any one the right to make the world worse for his having lived in it. This, in outline, is what I mean by a theory of life, and is also in outline the theory of life which I wish to commend to you. I wish to urge you to devote your lives to the work of human reform, and to set before yourselves the ambition to add somewhat to the grand total of human happiness and virtue. In the best sense of the term, every human life must

be aggressive in welldoing, and in this divinely ordained mission we must all be members of the Church militant; we must do our part toward the redemption of the world from wretchedness, ignorance and sin.

In the moral world, as in the physical, there is going on an upward transformation tending to life, beauty and righteousness; and also a downward transformation as surely tending to death, deformity and unrighteousness. In all ages of the world there have been heroic men and women, saintly in aspiration and life, who have drawn humanity upwards towards holiness and truth; and during all these ages the world has been filled with men and women of coarser mould, many of whom have been the pronounced champions of disorder and vice. Sometimes, and especially when our field of view is contracted, we conclude that the dominant forces are evil, and then we fall into the slough of pessimism; but when we take a broader survey of the world, and read the history of morals more attentively, we find room to believe that the prevailing transformation is the upward one toward light and life. Surely if each generation of men had been tending downward by never so little, the whole world by this time had been one Sodom; but it is doubtless true that at no other period in the world's history have

there lived so many men and women of heroic and saintly mould as now. The type of family life has never been so high. Public reprobation of sin has never been so prompt and so just. It has never been so easy to lead a life of moral serenity and sweetness. There has never been so much beauty and hopefulness in the world. There has never been such abundant reason to thank God for the blessedness of living and working. Into your theory of life I wish you would put this radiant and inspiring optimism. Be trustful in God and in the omnipotence of goodness. Be hopeful of mankind and ever look on the brighter side of human life.

The age of martyrs has not passed, but martyrdom has taken so many forms and has become so common that it has ceased, save in extreme cases, to strike the public eye. To-day, in all quarters of the globe, there are Christian missionaries with all the fervor and intrepidity of Saint Paul, men and women who, with their lives in their hands, turn their backs on civilization and kindred, and joyfully condemn themselves to privations and exile to the end that they may aid in establishing the promised kingdom of peace and good will among men. Was there ever martyrdom more conspicuous or more saintly than that of Father

Damien? Such a life gives new dignity and grandeur to human nature and sensibly exalts the standard of human virtue and duty. I see no reason why we may not say Saint Damien as reverently and as truly as Saint Stephen. We may be sure that whether in ancient times or in modern such lives and such sacrifices are well pleasing to God.

Every true life must embody the spirit of sacrifice and self-denial. If we receive and enjoy, it must be to the end that we may add to the stock of others' enjoyment. We must see them raised at least to our own plane of privilege; and while we thus abandon the old satisfaction of passive enjoyment, we shall find even a keener and purer pleasure in those activities which result in others' good. The sensible pleasure we take in adding to our own stock of knowledge is very great; but the pleasure we feel while informing another human soul is much greater. It is more blessed to give than to receive, and the most beatific life is one which is inspired and purified by the spirit of self-sacrifice.

As the instance is modern, let George Peabody serve as one term of contrast; let his history typify the kind of life that comports with human dignity and human destiny. For the other term of the contrast

select one case of the thousands that force themselves on public notice, say that of the man whose occupation is to put the bottle to his neighbor's lips, whose income means profligacy, wretchedness, degradation, disgrace and hideous death. Has the doctrine of two mighty and opposing forces, known as good and evil, ever seemed to you no more than an ethical theory? In any city or village which you chance to know count up all its benevolent and beneficent institutions, such as schools, churches, hospitals, etc., and then count up the saloons, gambling rooms and other haunts of vice. Is there not here an awful hand-to-hand conflict between real men of flesh and blood? What is assailed and what defended? Innocence, virtue, happiness, honor, everything that is noblest and best in human life. When the powers of evil so greatly outnumber the powers of good, what prevents human society from falling into absolute and hopeless ruin? It must be that the innate tendency of human nature is upward, and that good is mightier than evil. It is into this conflict that you must enter as active combatants if your life is to have a meaning and a purpose.

For purposes of right living there is no neutral ground that an honest man can occupy. It is not

enough merely to subsist or vegetate, to float lazily down the stream of time; but real living must be aggressive; we must often make our way against the current, and must sometimes even turn the current in a new direction. The blessedness of living consists in an activity directed to benevolent and beneficent ends; and for this reason the best condition into which one can be born is that of honest poverty. Young man, if you have health, thank Heaven that you have no visible inheritance save a sound body and brain, a tender conscience and an affectionate heart. You have everything to live for, and every moment of your conscious life may bring you its peculiar joy. Hope is more blessed than consummation. Pioneer life in a cabin is happier than a life of ease in a ceiled house. Activity brightens and sharpens, while indolence corrodes and dulls. If you would control your destiny and your happiness, place before yourselves some worthy and beautiful object for which to hope, pray and labor.

Count it a blessing to be called to do pioneer work. There is nothing more inspiring than the work of organization. To coördinate and set in motion forces which shall open some new and prolific source of human weal is akin to creation; and at such a pros-

pect every noble heart will beat faster, and the active brain will find a happy employment for all its inventive and directive resources. Is it a little thing thus to project one's thought and purpose into the future, and to make one's self an active agent in blessing the race long after one's name has faded from the minds of men? We may all aspire after this happy immortality, and may make it the deliberate purpose of our lives to re-create in some degree, not only the world of matter, but the higher world of man's moral life. The soul of every good man has, in an intelligible sense, been incorporated into the world of spiritual forces, just as the mind of wise men has been incorporated into the world of material forces. The steam engine is the genius of Watt informing inert iron. St. Paul's Cathedral is the soul of Sir Christopher Wren incarnate. This republic is the patriotism of Washington. There may not be a real transmigration of souls, but there is certainly a transfusion of genius, intellect and emotion. All this is simple and more common than it seems. As I speak I am merely translating the mind and heart of my teachers; and if I have taught you to any purpose, I shall teach most truly when, multiplied by hundreds, I come to teach your pupils. If you work in accordance with

the theory of life which I am attempting to unfold, all that is best in you will become incorporated into your schools, and your net personality will be repeated in every one of your pupils.

With each generation the work of the teacher begins anew, and if he will, he may taste the perennial charm of pioneer life. The child of to-day must be taught to read just as though no child had ever learned to read. Our tools, indeed, come to us by inheritance, but our toil is the toil of Sisyphus. The burden which our predecessors raised to the top of the hill has fallen to the bottom, and we must raise it in our turn just as though it had never been lifted. Knowledge, indeed, remains and accumulates, but skill perishes with the life that uses it.

In a comparative or modified sense, the work of the poet, the painter, the architect and the man of letters has been done, and done forever. Those who toil in these fields must compete with the whole world and with all time. The best that can be done remains, and almost as fresh as when it came from the hand of the Master. In these fields the achievements of genius confront us to inspire, but also to discourage and dismay. As distinguished from these well trodden and conquered fields, each new teacher finds a new

world as the sphere of his activities, and he may address himself to the task of a new creation.

Debt, used in the sense of obligation, is the normal and necessary condition of man. On entering life, our whole environment, material, intellectual, moral, religious, social and political, is ready-made for us. The hands that have wrought for us, if clasped in line, would reach back to the dawn of human history. The axe that has cleared the wilderness for our fields has been echoing through the ages. The civil liberty we enjoy has cost rivers of human blood. That it is possible for us to worship God with no one to molest or make afraid is because toleration has been purchased for us by innumerable martyrs. The largest factor in civilization is sacrifice. The men of one generation have sown in tears in order that those of coming generations might reap in joy. Every advance step that humanity has taken has been made at the cost of tears, groans, agonies and blood. Since this indebtedness of inheritance is involuntary, we are only half conscious of it; and many of its forms are so occult that they escape all but the keenest vision. We are debtors, I repeat, to the entire past of humanity, to all the generations of men that have preceded us on the earth; and this debt is as real as any debt that we can volun-

tarily contract, and the obligation to pay it is as sacred as any obligation that can bind a man of honor. But as there can be no repayment to the past, to whom can we discharge our debt unless to the generation that is to follow us? Humanity is one. From humanity we have borrowed this capital on which the business of life has been conducted, and to humanity we must return these inherited possessions with some rental in the way of improvements.

It is important to note the fact that if the world is to grow better we must transmit more than we have received. Our two talents must not be buried in the earth, but when returned there must go with them other talents which they have gained by use. Into what we have inherited we must incorporate some precious element which has proceeded from our own creative power. For in a secondary sense we are all creators, coworkers with God. Whatever material passes through our hands, however formless and inert it may be, should issue from them bearing the seal of our creative skill. The thoughts that we appropriate as a part of our intellectual inheritance should be subjected to the subtile chemistry of our heart and brain and transformed into winged messengers of life and hope. Freely we have received and freely we must

give. We are the heirs of all the ages, and we must transmit our inheritance in such a way that it may give to our successors on the earth visible advantages over ourselves. Their lives must be richer and fuller than ours, and we must impose a heavier debt on them than we ourselves have borne.

If I have made myself clear in what has preceded, you can now understand that a college is a sort of clearing house for the adjustment and settlement of debts which have accumulated against the last generation. We who are teachers are the agents through whom these debts are to be paid; while the students are not only receiving their own, but are, in turn, contracting a debt which they must pay to their successors on the earth. When the men who are now active on the stage of life provide schools for the education of the young, they are not engaged in almsgiving as some of them seem to think; but they are simply doing what honorable men take most pride in doing, paying an honest debt. As there is no possible escape from this inheritance in its thousand forms, so there is no honorable escape from this implied obligation to spend our lives in the service of humanity. I sometimes hear it said that the obligation to pay for the education of others' children is an injustice, and

that to receive such an education is a humiliation. In a distant State I am taxed to build bridges which I shall never cross, to support asylums and prisons in which I have no personal interest, and to pay the salaries of officials whose services I shall never require. Is this tax, therefore, an injustice? All my life I have been crossing bridges which I did not build; should I not therefore help to build bridges for others to cross? The property of others has been taxed in order to provide means for the protection of my property and person. Should I not therefore take my turn in furnishing such protection to others? The inmate of that asylum for whom the public purse provides a home is my brother man; shall I not therefore succor him? And possibly his misfortune may one day be mine; may I not risk a shilling on such a possibility without thinking it robbery? And need it cost us any sense of humility to cross bridges we did not build, to traverse streets we did not pave, or to worship in churches to whose support we have not contributed? These are public, and not private goods, provided by all for the benefit of all, and we may enjoy them with no other solicitude than a desire to do our part towards assuring to posterity the enjoyment of even greater blessings.

There are certain universal goods to the free enjoyment of which every human being is entitled by virtue of his birth, such as air, light, water and freedom, and such also is education which is but another name for freedom. When we speak of education as being free, we do not mean that it is a charity, as a coat given to a beggar is a charity; for the utmost we can do is to bring it within the easy reach of every human soul. After this has been done it must be earned by the sweat of the brain if it is ever acquired at all. The man who would provide education for no children but his own, has yet to learn the art of manly living.

In a former paragraph, when urging the mission of human reform, I had in mind the adaptation of crude material to higher uses, or, in more general terms, the re-creation of the natural world through human art. I will now return to this phase of my theme in order to discuss the subject of reform in its secondary and usual signification, as when we speak of educational, moral or political reform. Here we have in mind the giving of a new and better form, not to nature's handiwork, but to man's; and there is implied in this purpose the assumption, on our own part, that the existing form is wrong. How does it happen, then,

that human institutions stand in need of reformation? Reformation implies a return towards simplicity, and consists in restoring function to office, spirit to form, and content to word; or, in general, it consists in reuniting soul with body. Formality is always easier than spirituality; and the danger of mistaking form for spirit is always imminent. The comments of the rabbins on the law of Moses became so numerous and so authoritative that the law disappeared from sight and the Mishna remained; and following the natural course of things, there arose commentators on the Mishna whose comments became in turn so numerous and so authoritative that the Mishna was lost from sight and the Gemara remained, a commentary on a commentary on the law of Moses! In the fifth century B. C., the Sophists made a merchandise of knowledge and reduced human learning to a verbal formulary. The progress of human thought was arrested, for men were no longer dealing with ideas, but with terms. Then Socrates, "the cross-questioning god," appeared, and restored to empty forms their spiritual content, and so produced the first great intellectual reform.

The ancient Jews had become spiritually dead because they had lapsed completely into hollow formalism;

spirit had been completely divorced from letter; and they worshipped the letter. Then the Great Teacher appeared whose mission, in his own words, was to fulfill; that is, to restore to the words of the law their spiritual and living content. I need not point out how Protestantism, Puritanism, Quakerism and Methodism all had their origin and vindication in this tendency to exalt form over spirit.

In the time of Charles the First the progress of civil freedom had been obstructed because the king had substituted prerogative for function. Then Cromwell took the case in hand, with one blow of his axe cut away the offending thing and restored to English liberty her rightful way. In France, in 1789, the monster that had crushed out human liberty under the name of kingly prerogative was hydra-headed; but the deliverer came, the guillotine was set up in Paris, her streets ran blood for a season, function was restored to office, and French liberty went on her way triumphant.

In general, educational reform has consisted in the substitution of things for signs, or, rather, in bringing together word and content. This was particularly the mission of Comenius and Pestalozzi, whose constant exhortation was to study things rather than words.

Rousseau took a wider survey of the field of reform and aimed to relieve education of its conventionalities by bringing it back to nature, or, so far as possible, to the reactions of the child's primitive environment. In education there is always danger of substituting the book for the teacher, the word for the idea which it represents. Reform should consist, not in displacing the book and the word, but in endowing teachers with the power of interpretation, and in learning things through words, or in making an indissoluble union between things and words.

In all these cases, religious, political, intellectual and educational, the important question is whether it is not possible to keep the stream of thought and action clear of those conventional and artificial obstructions, whether the periodical blocking of the stream may not be avoided, or at least, whether relief may not be applied at almost insensible intervals so that no violent and destructive measures may be required. In other words, may not a peaceful and normal evolution be substituted for a destructive and reckless revolution? If I interpret history aright, this is the tendency of progressive civilization; and at least in education I feel sure that an every day reformation is possible under conditions that are not hard

to realize, and that this evolution might avert those disasters known as educational reforms. I will speak briefly of one or two of these conditions.

For the wise direction of educational affairs there is need of cultivating what might be called educational statesmanship: the ability to take an accurate, almost prophetic forecast of the current and consensus of human opinion as it bears on this subject, and skill in organizing forces which will act over wide areas and inspire and direct all subordinate agencies as they are included in the practical management of schools. What is the source of this forecast and this breadth of view? As general history is the statesman's chart and logbook, so the history of educational thought and practice must be one source of what I have ventured to call educational statesmanship. From an observation of the course of educational thought in past time, we may infer its probable direction in the future; and warned by the debris of "systems" which mark the path of educational history, we may economize time, effort and money, and thus eliminate chances of error and failure. I am firm in the belief that the serious study of educational history is the constitutional remedy for those "inconsiderate reforms" or spasms which have become almost periodical

and may be predicted with almost as much certainty as tornadoes, as well as for those real crises or revolutions which result from the secular accumulation of abuses.

I have said that the study of educational history will give us a clew to the probable direction of educational thought; but as the course of events has been for the most part instinctive or impulsive, rather than rational, its projection into the future needs to be corrected by some fixed point in advance, and this point of direction is revealed by educational science. Patrick Henry was a great statesman and an incomparable orator; but he was manifestly wrong when he said "I know of no way of judging of the future but by the past," if he meant this for a general truth. The past is not necessarily to be projected into the future, and the future itself is subject in no small degree to human control. We may shape the future into correspondence with our ideals; we may project into it, not merely the past, but our own conception of truth and beauty; and in educational effort these conceptions are in part the products of scientific study. There is a science of the soul, there is a science of human duty, there is a theory of the State; and their point of convergence is the polestar towards which

humanity is verging, and by which the course of education is to be directed.

In urging upon the teacher the duty of leading an aggressive life, and of impressing himself on the world for its good, I have been almost unconsciously drawn to the work of teaching, because I think that the most active and powerful agent in the upward transformation of society is the teacher. But it is not enough to have a vague sense of being useful to the world; effective work of whatever kind requires definite conceptions and aims. In what particular ways, then, may the teacher be a benefactor?

One essential condition of right living is correct and effective thinking—the ability to divest a complex question for the moment of the halo of feeling, to analyze it by a process of cold logic, to discover its bearings on known principles of right and wrong, and to draw a conclusion which shall determine one's course of action with reference to it. This is what is comprehended in a training of the judgment, and the result of such training is the habit of giving instant domination to the reason over feeling and passion when they interfere to prevent the course of action. The logical engine may be trained to work automatically, and when this is done it makes its

possessor self-contained and self-poised, a law unto himself. These logical processes are best learned by dealing at first with problems which are naturally divested of all feeling, such as those of mathematics and the physical sciences; and when the faculty has received its training it may be applied to problems which are invested with feeling, such as those of history, literature and geography. Only the eye that is completely achromatic is fit to perceive the truth in the domain of philosophy, politics and morals.*

Real living brings a human being into close relations with the material world, the industrial world, the social world, the moral world, and the civil world; and the possibility of right living makes necessary a knowledge of these various relations. If man is to lead an active, positive life, there is every probability that he will go wrong unless he can see with some clearness his sphere of duty with respect to these various orders of activity. This, in the art of education, is the sphere of useful or instrumental knowledge, and constitutes what is called practical education. If well conducted, it assures to the learner a life of prosperity, usefulness, happiness and honor.

These three things I take to be certain: every man

*Renan, *Souvenirs*, p. 285.

has a right to happiness; he will seek this happiness in some quarter; if he does not find it in the region of the higher emotions he will find it in the region of the baser feelings and the passions. I would therefore make happiness one of the distinct aims of education; and to this end the mind must be supplied with knowledge which will yield mental satisfaction or intellectual delight. No one is in a state of moral safety while his happiness is dependent on conditions which lie outside of himself; the sources from which he habitually draws his happiness should be within. This, in the art of education, is the sphere of culture knowledge, and embraces history, geography, literature, art and music. The pupil should not only be made happy for the present, but large provisions should be made for his happiness in the future. The sorrows of life come only too soon and they will make shipwreck of the human soul unless there are resources within from which consolation and hope may be derived. Perhaps there is no spiritual gift more to be coveted than serenity, a calmness and composure of soul which gives steadiness to purpose and preserves us from the fury of emotional storms. Make liberal provision for the happiness of your pupils and you will make pleasures unnecessary.

Closely connected with the culture element in education there is another to which I can give no name, and which I may be unable to describe; but in importance it takes precedence of all others. I have seen men and women whose whole lives have been inspired, beautified and ennobled by high ideals that they have caught from some inspiring teacher. With bent form and hair whitening for the grave, the face still beams with high resolve and radiant hope. A peaceful serenity sweetens a life that has experienced many sorrows, and a sense of personal dignity lends an air of grace to the commonest duties. A bow of promise is always in the heavens; and there is always some beautiful thing to hope for and to work for. The brow has been furrowed by the cares and sorrows of a long life, but it seems to reflect some of the radiance that falls on it from the brighter world beyond.

Sometimes measure your teaching power by this standard and you may discern the best gift that I covet for you. Of all the good you can do in this world, this is doubtless the chief; and if you can do it you are the very ministers of God, good angels sent into the world to aid in its redemption.

I can dwell only a moment on some of the endowments you will need for such a mission as I have tried to describe.

You must be benevolent in the truest and fullest sense of the term; your whole nature must be swayed and governed by a desire to do good in the world. The sorrows of life must melt your heart to tenderness and must impel your feet to be ever running on errands of mercy. From moment to moment you must live in the consciousness that this is the prime service which God requires of every creature; and you must make every other purpose subservient to this. Without any austerity of manner, speech, or dress as a visible sign of your resolves, you must lead a life of devotion and even consecration. Such was the life of Pestalozzi, Arnold, and of the beloved Page, real apostles and teachers with a commission as sacred as though conferred by the laying on of hands.

There is a group of moral qualities including magnanimity, charity, toleration and judicial fairness, which should be counted among the very best gifts that you can covet; and a life that is inspired and guided by these virtues will be mighty in good works.



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